

Automation and Software tools

Let's connect.

Version 2019



Control (PLC) - u-control

Control studio

Page A.4



- CoDeSys-based // C/C++
- Dual-core CPU, 512 Mbyte RAM
- Engineeringtool u-create studio

Control web

Page A.5



- Web-based // HTML5
- Dual-core CPU, 512 Mbyte RAM
- With embedded Software

I/O system IP20 - u-remote

Fieldbus coupler

Page B.4



- PROFINET, PROFIBUS, EtherCAT, ModbusTCP, EtherNet/IP, DeviceNet, CANopen, POWERLINK

Digital input modules

Page B.20



- 4-16 digital inputs
- Positive & negative switching
- 2-wire, 3-wire and 3-wire+FE Connection

Digital output modules

Page B.36



- 4-16 digital outputs
- Positive & negative switching
- 2-wire, 3-wire and 3-wire+FE Connection

Digital in-/output modules

Page B.52



- 8 digital inputs/outputs (configurable)
- Positive switching
- 2-wire, 3-wire Connection

Pulse width modulation and stepper motor modules

Page B.54



- 2 pulse width outputs
- Load capacity up to 0.5 - 2 A per channel
- 4 digital inputs and 2 inputs for 2-channel incremental (rotary) encoder
- 50 W Power output stage

Analogue input modules

Page B.58



- 4 and 8 analog inputs
- 12 to 32 bit resolution
- 2-wire, 3-wire and 3-wire+FE Connection
- Extended diagnostic function

I/O System IP20 - u-remote

Temperature modules and potentiometer input module

Page B.70



Temperature modules:

- 4 - 8 analog inputs
- Temperature measurement via resistance

Potentiometer input module:

- 4 potentiometer inputs
- Measuring area from 300 Ω ... 50 kΩ

Strain gauge modules

Page B.76



- 2 differential inputs for strain gages
- 24 bit resolution
- 4- or 6-wire connection

Analogue output modules

Page B.80



- 4 analog outputs
- 16 bit resolution
- 2-wire and 4-wire connection
- Extended diagnostic function

Digital counter and communication modules

Page B.88



Counter modules

- Latch, gate- and reset input
- Counter width 32 Bit
- Maximum input frequency 100 kHz

Communication modules:

- SAI-PRO modules can be integrated
- Interface for RS232, RS485 and RS422 Peripheria
- IO-Link standard according to IEC 61131-9

Safe I/O modules and safe power-feed modules

Page B.98



- PROFIsafe or FailSafe over EtherCAT
- 4 to 8 digital inputs (partly parameterizable)
- 4 digital outputs (partly parameterizable)
- OSSD-output reports status to controller

Power-feed modules

Page B.106



- Input of the current paths
- Feed-in current 10 A

Accessories

Page B.110



- Placeholder modules
- Conclusion kit
- Potential distribution modules

I/O system IP20

u-remote

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Achieving maximum efficiency in the control cabinet

With great savings potential and optimum system performance

u-remote from Weidmüller is the reliable interface between field bus and field level in automation. The modular system is based on various components: a fieldbus coupler, up to 64 I/O modules, optional power-feed modules and a wealth of accessories, such as markers and terminating elements.

The fieldbus coupler is the central link between the various field bus standards and the u-remote system bus. At the same time, up to 64 I/O modules are supplied via its integrated power contacts. The well-engineered technology of the connection system enables 2 x 10 A to be supplied for the input and output modules and the system voltage to be fully supplied through the fieldbus coupler. Every fieldbus coupler provides direct access to the u-remote system via a web server without additional software having to be installed. This means that the system can be parameterised and its configuration checked. Inputs and outputs can also be checked or influenced. The connection may take the form of an Ethernet-based field bus or micro USB. The u-remote fieldbus couplers are integrated in the standard simple manner. The corresponding development environments of the control systems and the device description files available online, e.g. GSD, ESD, EDS oder XML, can be used to easily perform the necessary settings.

The modularly structured I/O modules are unique in that they allow the sensor and actuator wiring to be designed in both a robust and plug-in manner. This allows the electronics to be replaced at any time even with permanent wiring. This achieves an invaluable time saving, in terms of both wiring inaccessible cabinets and rapidly replacing sensors. Thanks to the "PUSH IN" technology for up to 1.5 mm², in their narrowest form of 11.5 mm, the modularly structured u-remote I/O modules can be used for all sensor and actuator connections with a very high connection density. A clear status and diagnosis display on the connection also ensures rapid and precise checks for individual sensors and actuators.

More intelligent automation more easily specified:
u-remote facilitates your planning and offers unique functions.



**More Performance.
Simplified.**
u-remote.



Innovative functions for more efficient automation solutions

With u-remote, Weidmüller has completely rethought the I/O technology for IP20 environments. You can thus expect a system that is full of clever details and allows you to install innovative, cost-saving and easy-to-handle automation solutions in your project.



Why waste space?

Design your cabinets one size smaller: u-remote, with the highest connection density on a module, offers you the most slender module width and a far lower space requirement for power-feed modules - an unrivaled channel density and extremely flexible design options.

**Simply plug and go**

The plug-in connection level allows sensors and actuators to be connected with pre-assembled cables. This means improved time benefits, better handling, and minimises the number of mistakes in system wiring. Decentralised automation modules in particular are so very easy to transfer into productive operation.

**Diagnostics, even without a control connection**

u-remote simplifies machine commissioning section-by-section and accelerates maintenance work with its integrated web server. Thanks to the high performance diagnostic tool, you can simulate the functionality of inputs and outputs prior to control connection.

You can conduct plain text error analyses using any standard browser – whether you're working on-site or remotely.

**Intelligently separated**

u-remote separates the supply for inputs and outputs using two 10 A current paths which are able to withstand high loads. High productivity translates into fewer power-feed modules and therefore more space and less planning. And your system can be quickly maintained while retaining full diagnostic capability, as inputs and outputs can be switched off independently of one another.



DP-V1; Web server tool;
Sub-D connection



More Performance. Simplified.

The diagram illustrates the power supply system architecture, divided into three main functional blocks:

- Control and Input Section (Left):** Includes a USB interface, a microcontroller (μC), and a Sub-D connector. The μC is connected to the USB and Sub-D. A signal path labeled "8x" with a diode symbol connects the USB to the μC .
- Power Conversion Section (Middle):** Features a "24 V/10 A Input" and a "24 V/10 A Output". The input is connected to a DC/DC converter block, which is then connected to a diode bridge rectifier. The output of the rectifier is connected to a filter capacitor and a diode bridge rectifier, which is then connected to the "24 V/10 A Output".
- System Bus Section (Right):** Shows the "System bus" connected to the μC and the DC/DC converter. The bus is also connected to a stack of four output voltage regulators, labeled U_{SYS} , U_{IN} , U_{OUT} , and U_{OUT} .

PROFIBUS

- 2 x 10 A current paths
- Address can be set using rotary switch
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C
- PROFIBUS DP-V1 up to 12 MBaud

UR20-FBC-PB-DP-V2



Technical data

System data

Connection type
Field bus protocol
Process data
Parameter data
Diagnostic data
max. number of modules
Configuration interface
Transmission rate of field bus, max.
Transmission speed of system bus, max.

9-pole SUB-D socket (female)
PROFIBUS DP-V1
488 Byte
244 Byte
244 Byte
64
Micro USB 2.0
12 Mbit/s
48 Mbit

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{IN} (input current path) , max.
Feed current for I_{OUT} (output current path) , max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.

24 V DC +20 %/-15 %
24 V DC +20 %/-15 %
10 A
10 A
90 mA

General data

Weight
Dimensions H x W x D

247 g
120 mm / 52 mm / 76 mm

Note

Download of GSD-file on www.weidmueller.com

Ordering data

Module variants

Field bus coupler, Profibus DP-V1

Note

Type	Qty.	Order No.
UR20-FBC-PB-DP-V2	1	2614380000
A termination kit (UR20-EBK-ACC) is included in the coupler package		

Accessories

Termination kit
Swivel marker
Connection marker for pusher neutral
Connection marker for pusher custom printing
Module marker for neutral
Module marker for custom printing
USB cable (USB A to Micro USB)

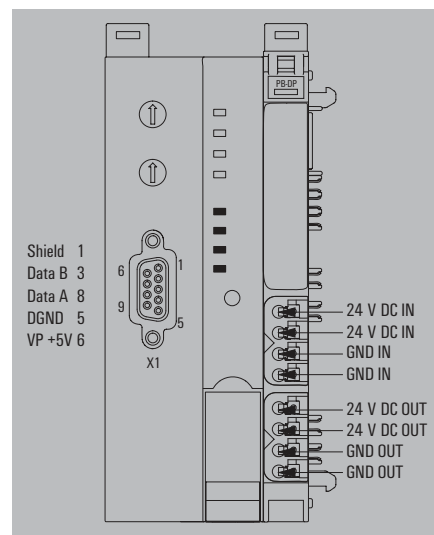
Type	Qty.	Order No.
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC NE WS	960	1323710000
PM 2.7/2.6 MC SDR	192	1323700000
DEK 5/8-11.5 MC NE WS	500	1341630000
DEK 5/8-11.5 MC SDR	100	1341610000
IE-USB-A-MICRO-1.8M	1	1487980000

Replacement parts

Plug-in connector unit

UR20-PK-2614380000-SP	5	2623120000
1 roll = 1000 labels = 1 Qty. 1 sheet = 60 labels = 1 unit		

Note



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-2614380000

Web server tool;
two RJ45 ports; 100 Mbps



More Performance. Simplified.

The diagram illustrates the control system architecture, divided into three main functional blocks:

- Control Unit (Left):** Contains a μC (Microcontroller) connected to a USB interface, an 8x optoisolator, and two RJ45 ports.
- Power and Measurement Unit (Middle):** Features a 24 V/10 A Input and a 24 V/10 A Output. The input is connected to a DC/DC converter, which then feeds into a DC/DC converter block. The output is connected to a DC/DC converter block. The output is connected to a DC/DC converter block.
- System Bus (Right):** A central bus connecting the μC to the DC/DC converter and the output stage. It also connects to a System bus block, which is further connected to a System bus block.

PROFINET

- 2 x 10 A current paths
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C
- PROFINET IRT/RT capable
- PROFINET diagnosis
- LLDP - Neighborhood detection

Technical data

System data	
Connection type	2 x RJ45 plug-in connectors
Field bus protocol	PROFINET IRT
Process data	1024 Byte
Parameter data	1485 Byte
Diagnostic data	1485 Byte
Fast Startup	Yes
max. number of modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus, max.	100 Mbit/s
Transmission speed of system bus, max.	48 Mbit/s
Supply	
Supply voltage for inputs	24 V DC +20 %/-15 %
Supply voltage for outputs	24 V DC +20 %/-15 %
Feed current for I_{IN} (input current path) , max.	10 A
Feed current for I_{OUT} (output current path) , max.	10 A
Current consumption I_{IN} (power segment of the field bus coupler), typ.	100 mA
General data	
Weight	247 g
Dimensions H x W x D	120 mm / 52 mm / 76 mm
Note	

Ordering data

Module variants
Field bus coupler, PROFINET IRT
Note

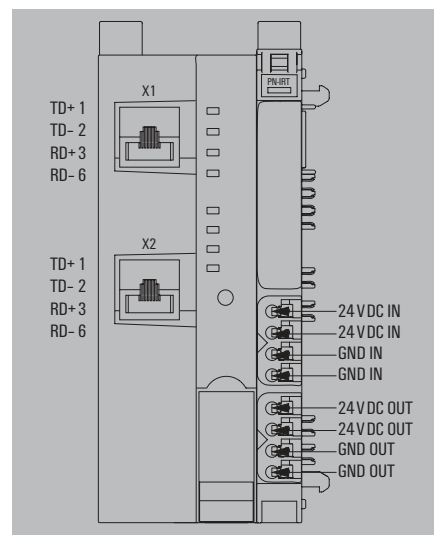
Accessories

Accessories
Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
USB cable (USB A to Micro USB)
Replacement parts
Plug-in connector unit
Note

UR20-FBC-PN-IRT-V2



Type	Qty.	Order No.
UR20-FBC-PN-IRT-V2	1	2566380000
A termination kit (UR20-EBK-ACC) is included in the coupler package		
Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESD UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000
Type	Qty.	Order No.
UR20-PK-2566380000-SP	5	2623640000
1 roll = 1000 labels = 1 Qty. 1 sheet = 60 labels = 1 unit		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-2566380000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

EtherCAT®

More Performance. Simplified.

EtherCAT

- 2 x 10 A current path
- Web server
- System supply for 64 I/O modules
- Temperature range: -20... +60 °C
- Various EtherCAT services

UR20-FBC-EC



Technical data

System data

Connection type
Field bus protocol
Process data
Parameter data
Diagnostic data
max. number of modules
Configuration interface
Transmission rate of field bus, max.
Transmission speed of system bus, max.

2 x RJ45 plug-in connectors
EtherCAT
1024 Byte
4 kByte
3200 Byte
64
Micro USB 2.0
100 Mbit/s
48 Mbit/s

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{IN} (input current path) , max.
Feed current for I_{OUT} (output current path) , max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.

24 V DC +20 %/-15 %
24 V DC +20 %/-15 %
10 A
10 A
130 mA

General data

Weight
Dimensions H x W x D

227 g
120 mm / 52 mm / 76 mm

Note

Download of ESH-file on www.weidmueller.com

Ordering data

Module variants

Field bus coupler, EtherCAT

Note

Type	Qty.	Order No.
UR20-FBC-EC	1	1334910000

A termination kit (UR20-EBK-ACC) is included in the coupler package

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
USB cable (USB A to Micro USB)

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000

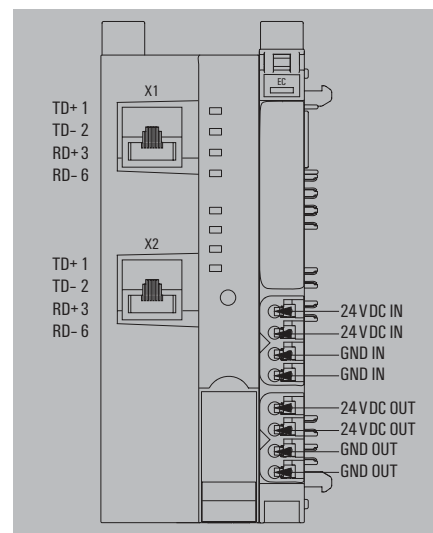
Replacement parts

Plug-in connector unit

UR20-PK-1334910000-SP	5	1484440000
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1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.

Note



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334910000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

ModbusTCP field bus coupler

Web server tool; two RJ45 ports; 10/100 Mbps

ModbusTCP

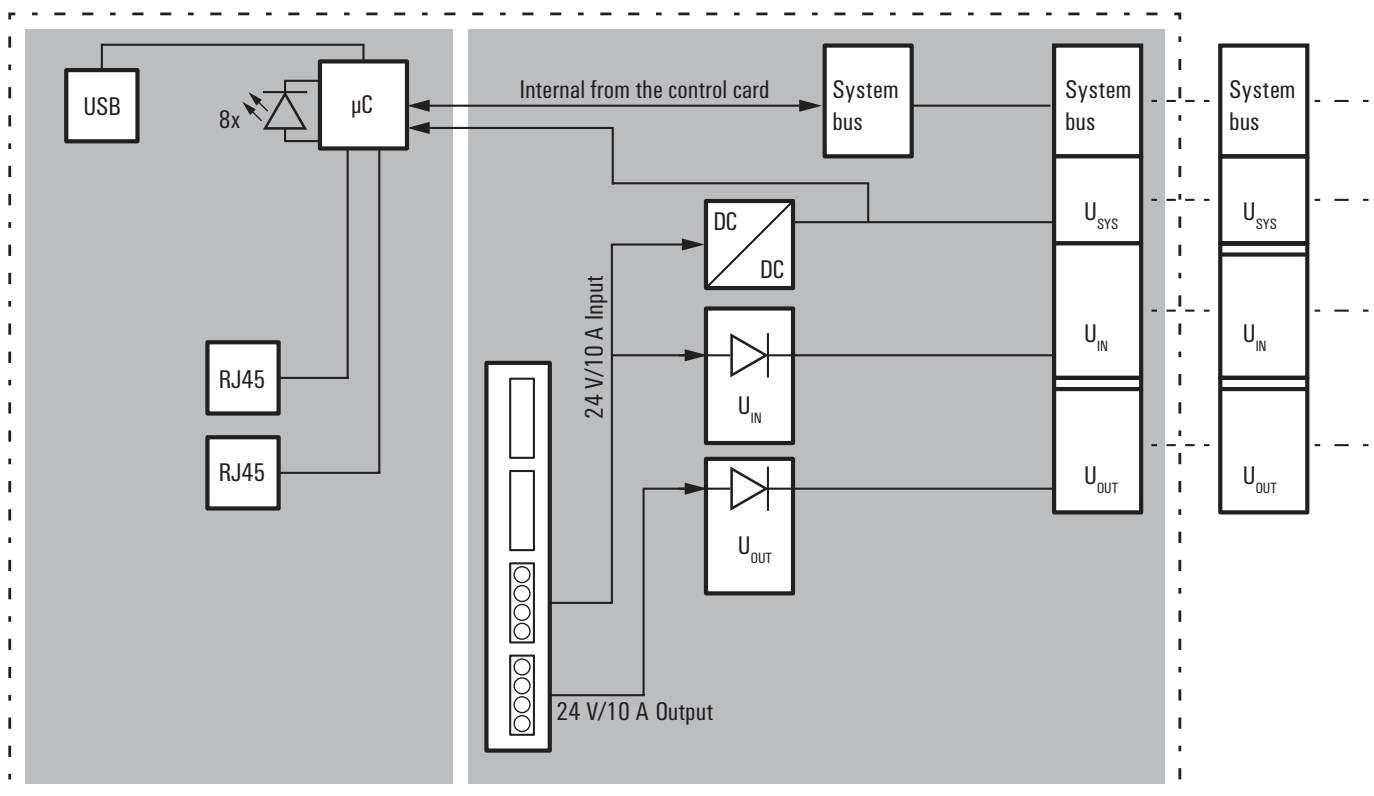
System safety around the globe is provided by the ModbusTCP version, which is stated in IEC 61158 as an Industrial Ethernet Standard. The UR20-FBC-MOD-TCP-V2 from Weidmüller is a field bus coupler designed in accordance with IEC 61158. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus.

The coupler can be activated with a system-independent web server application via the USB service interface or the Ethernet ports. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The system's initial power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the ModbusTCP products from Weidmüller make full use of all the latest technological possibilities, such as diagnosis options, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

Block diagram Modbus TCP fieldbus coupler



ModbusTCP

- Dual LAN mode
- 2 x 10 A current path
- Various Modbus services
- Web server
- System supply for 64 I/O modules
- Temperature range: -20... +60 °C

UR20-FBC-MOD-TCP-V2



Technical data

System data

Connection type
Field bus protocol
Process data
Parameter data
Diagnostic data
max. number of modules
Configuration interface
Transmission rate of field bus, max.
Transmission speed of system bus, max.

2 x RJ45 plug-in connectors
Modbus/TCP
8 kByte
1024 Byte
1024 Byte
Micro USB 2.0
100 Mbit/s
48 Mbit/s

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{IN} (input current path), max.
Feed current for I_{OUT} (output current path), max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.

24 V DC +20 %/-15 %
24 V DC +20 %/-15 %
10 A
10 A
112 mA

General data

Weight
Dimensions H x W x D

223 g
120 mm / 52 mm / 76 mm

Note

Ordering data

Module variants

Fieldbus coupler, ModbusTCP

Note

Type	Qty.	Order No.
UR20-FBC-MOD-TCP-V2	1	2476450000
A termination kit (UR20-EBK-ACC) is included in the coupler package		

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
USB cable (USB A to Micro USB)

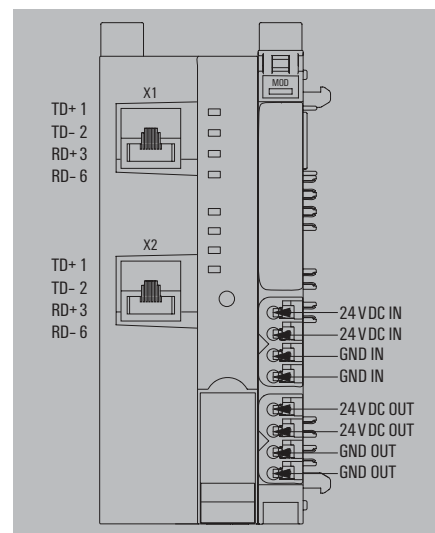
Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000

Replacement parts

Plug-in connector unit

UR20-PK-2476450000-SP	5	2485280000
1 roll = 1000 labels = 1 Qty. 1 sheet = 60 labels = 1 unit		

Note



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-2476450000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Web server tool;
two RJ45 Ports; 100 Mbps



More Performance. Simplified.

EtherNet/IP

- 2 x 10 A current path
- Web server
- System supply for 64 I/O modules
- Temperature range: -20... +60 °C

UR20-FBC-EIP



Technical data

System data

Connection type
Field bus protocol
Process data
Parameter data
Diagnostic data
max. number of modules
Configuration interface
Transmission rate of field bus, max.
Transmission speed of system bus, max.

2 x RJ45 plug-in connectors
EtherNet/IP
988 Byte
4 kByte
3008 Byte
Micro USB 2.0
100 Mbit/s
48 Mbit/s

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{in} (input current path) , max.
Feed current for I_{out} (output current path) , max.
Current consumption I_{in} (power segment of the field bus coupler), typ.

24 V DC +20 %/-15 %
24 V DC +20 %/-15 %
10 A
10 A
112 mA

General data

Weight
Dimensions H x W x D

223 g
120 mm / 52 mm / 76 mm

Note

Download of EDS-file on www.weidmueller.com

Ordering data

Module variants

Field bus coupler, EtherNet/IP

Note

Type	Qty.	Order No.
UR20-FBC-EIP	1	1334920000
A termination kit (UR20-EBK-ACC) is included in the coupler package		

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
USB cable (USB A to Micro USB)	

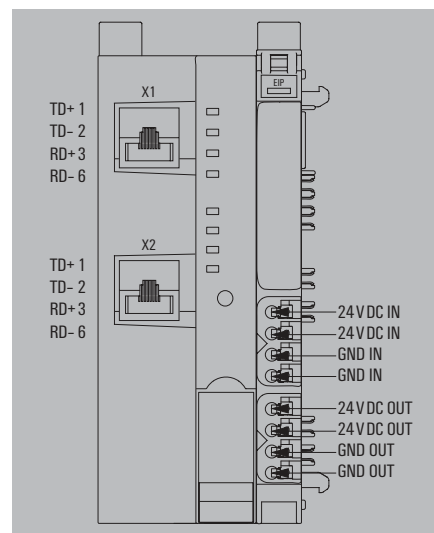
Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000

Replacement parts

Plug-in connector unit

Type	Qty.	Order No.
UR20-PK-1334920000-SP	5	1541290000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		

Note



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334920000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

DeviceNet field bus coupler

Web server tool; PCB plug-in connector



DeviceNet is a serial, CAN-based fieldbus system, which was developed by Allen-Bradley and later on passed as an open standard to the ODVA (Open DeviceNet Vendor Association). Today it is used worldwide in automation technology.

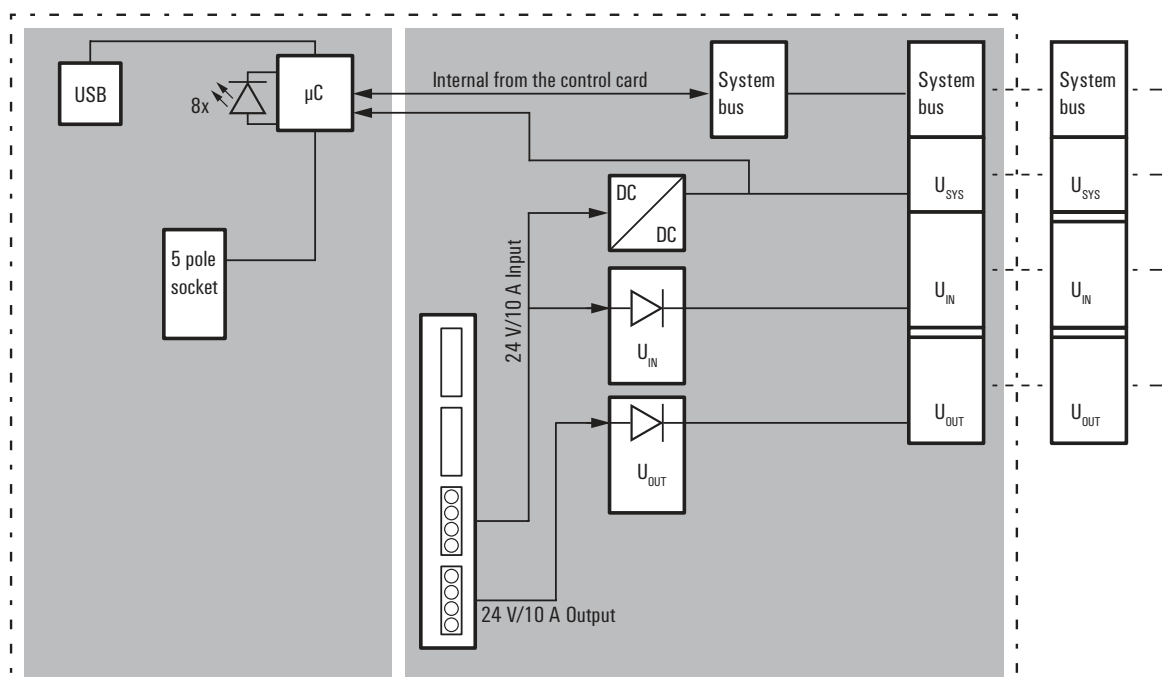
Classical can DeviceNet operated with a maximum of 64 network nodes per fieldbus segment. The fieldbus coupler UR20-FBC-DN is connected via a 5-pin PCB connector to the network. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus.

The coupler can be activated with a system-independent web server application via the USB service interface. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The initial system power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the DeviceNet products from Weidmüller make full use of all the latest technological possibilities, such as diagnosis options, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

Block diagram DeviceNet fieldbus coupler



DeviceNet

- 2 x 10 A current path
- Web server
- System supply for 64 I/O modules
- Temperature range: -20... +60 °C

UR20-FBC-DN



Technical data

System data

Connection type
Field bus protocol
Process data
Parameter data
Diagnostic data
max. number of modules
Configuration interface
Transmission rate of field bus, max.
Transmission speed of system bus, max.

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{IN} (input current path) , max.
Feed current for I_{OUT} (output current path) , max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.

General data

Weight
Dimensions H x W x D

Note

Connection socket for 5-pin PCB connector

DeviceNet

1008 Byte

4 kByte

3008 Byte

64

Micro USB 2.0

500 kbit/s

48 Mbit/s

24 V DC +20 %/-15 %

24 V DC +20 %/-15 %

10 A

10 A

75 mA (+15 mA from DeviceNet supply)

219 g

120 mm / 52 mm / 76 mm

Download of EDS-file on www.weidmueller.com

Ordering data

Module variants

Field bus coupler, DeviceNet

Note

Type	Qty.	Order No.
UR20-FBC-DN	1	1334900000

A termination kit (UR20-EBK-ACC) is included in the coupler package

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
USB cable (USB A to Micro USB)
PCB plug-in connector, socket plug, 5 pole, 10 pin
PCB plug-in connector, socket plug, 5 pole, 5 pin

Replacement parts

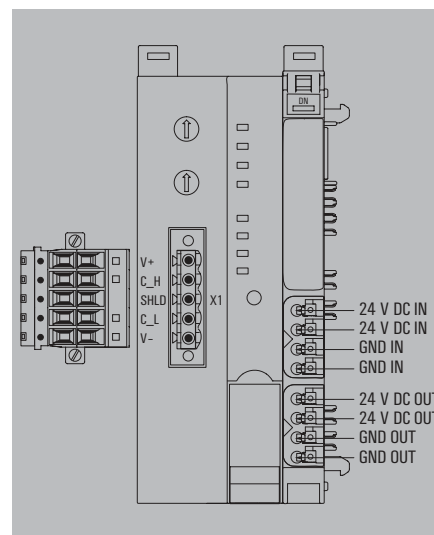
Plug-in connector unit

Note

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000
BLDZ DN5.08/05/180F GY BX PRT	50	1919990000
BLZ DN 5.08/05/180F AU GY BX PRT	50	1933550000

UR20-PK-1334900000-SP	5	2003540000
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1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334900000

CAN field bus coupler

Web server tool; Sub-D connection



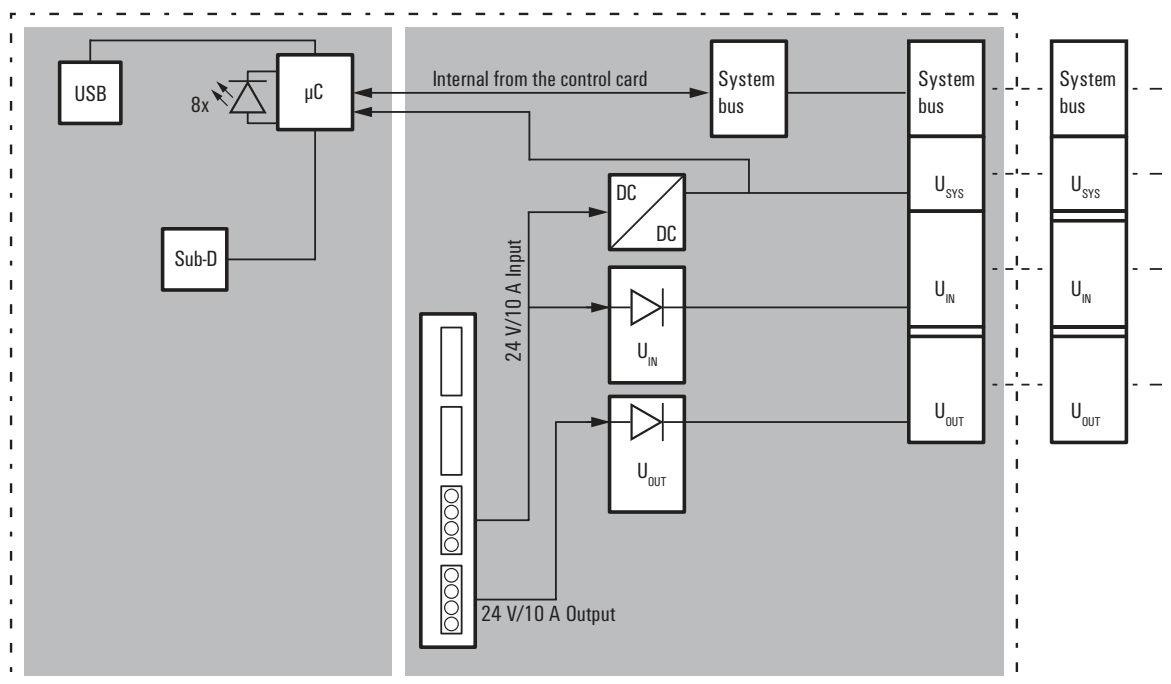
The CAN bus (Controller Area Network) is a serial fieldbus, which was introduced in 1983 by Bosch and Intel. Due to the good characteristics it is particularly suitable for applications where high data security is required. The fieldbus coupler UR20-FBC-CAN uses the CAN based Layer 7 communication protocol CANopen, the device profile CiA DS401 for digital and analog I/O modules is supported. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus.

The coupler can be activated with a system-independent web server application via the USB service interface. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The initial system power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the CANopen products from Weidmüller make full use of all the latest technological possibilities, such as diagnosis options, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

Block diagram CANopen fieldbus coupler



CANopen

- 2 x 10 A current path
- Web server
- System supply for 64 I/O modules
- Temperature range: -20... +60 °C

UR20-FBC-CAN



Technical data

System data

Connection type
Field bus protocol
Process data
Parameter data
Diagnostic data
max. number of modules
Configuration interface
Transmission rate of field bus, max.
Transmission speed of system bus, max.

9-pole SUB-D connector (male)

CANopen

488 Byte

244 Byte

244 Byte

64

Micro USB 2.0

1 Mbit/s

48 Mbit/s

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{IN} (input current path) , max.
Feed current for I_{OUT} (output current path) , max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.

24 V DC +20 %/-15 %

24 V DC +20 %/-15 %

10 A

10 A

90 mA

General data

Weight
Dimensions H x W x D

219 g

120 mm / 52 mm / 76 mm

Download of EDS-file on www.weidmueller.com

Note

Ordering data

Module variants

Field bus coupler, CANopen

Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
USB cable (USB A to Micro USB)

Type	Qty.	Order No.
UR20-FBC-CAN	1	1334890000

A termination kit (UR20-EBK-ACC) is included in the coupler package

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000

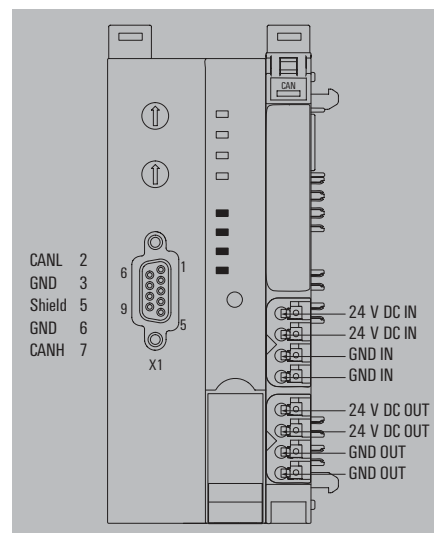
UR20-PK-1334890000-SP	5	2003530000
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1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.

Replacement parts

Plug-in connector unit

Note



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP MSIP-REM-WMG-1334890000
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

POWERLINK Fieldbus Coupler

Webserver Tool;

Two RJ45 ports; 100 Mbps

ETHERNET 
POWERLINK

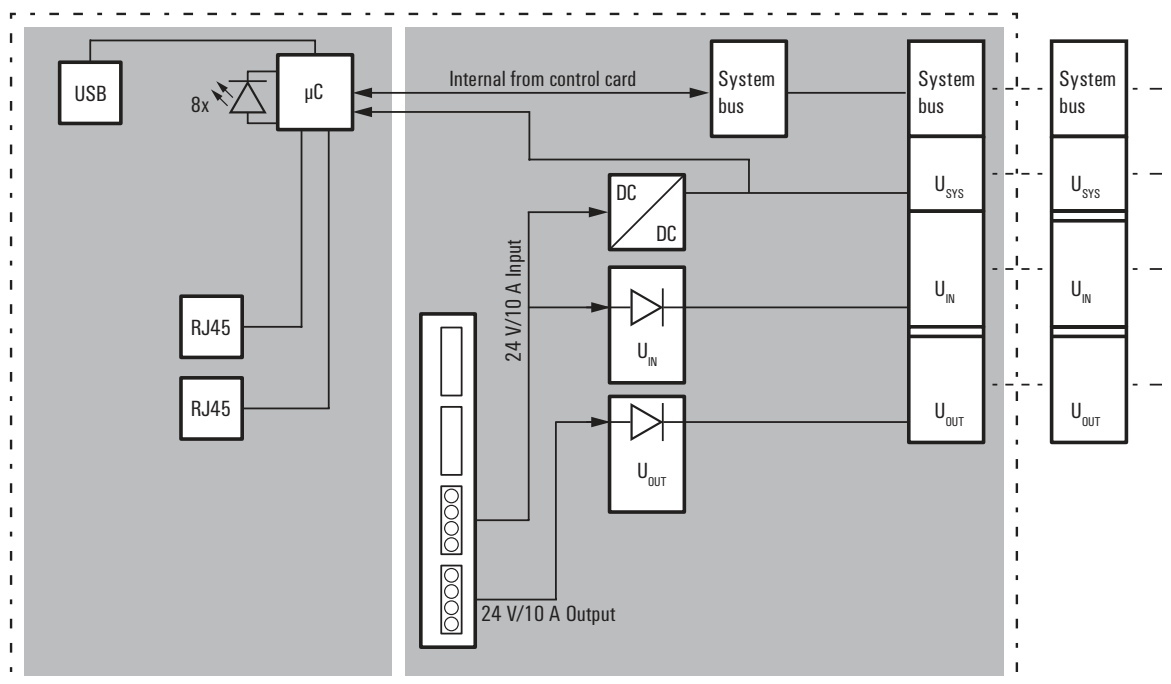
The POWERLINK fieldbus coupler supports the Industrial Ethernet standard. An integrated web server enables system diagnostics even before the controller is connected. The UR20-FBC-PL fieldbus coupler is a Ethernet POWERLINK Standardization Group (EPSG)-certified Ethernet POWERLINK device. It is the head module for the u-remote system bus, to which up to 64 active u-remote modules can be connected. The POWERLINK coupler has two Ethernet connections, the integrated hub has a supports a line network structure.

The coupler can be activated with a system-independent web server application via the USB service interface or the Ethernet ports. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The initial system power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the POWERLINK products from Weidmüller make full use of all the latest technological possibilities, such as XDD files and diagnosis messages, they actively support your application in the most important tasks – from engineering and commissioning to faults.

More Performance. Simplified.

Block diagram POWERLINK Fieldbus Coupler



POWERLINK

- 2 x 10 A current path
- Address can be set using rotary switch
- Web server
- System supply for 64 I/O modules
- Temperature range: -20... +60 °C

Technical data

System data

Connection type
Field bus protocol
Process data
Parameter data
Diagnostic data
max. number of modules
Configuration interface
Transmission rate of field bus, max.
Transmission speed of system bus, max.

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{IN} (input current path) , max.
Feed current for I_{OUT} (output current path) , max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.

General data

Weight
Dimensions H x W x D

Note

Ordering data

Module variants

Field bus coupler, POWERLINK

Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
USB cable (USB A to Micro USB)

Replacement parts

Plug-in connector unit

Note

UR20-FBC-PL



2 x RJ45 plug-in connectors

POWERLINK

2980 Byte

4 kByte

3008 Byte

64

Micro USB 2.0

100 Mbit/s

48 Mbit/s

24 V DC +20 %/-15 %

24 V DC +20 %/-15 %

10 A

10 A

100 mA

224 g

120 mm / 52 mm / 76 mm

Download of XDD-files on www.weidmueller.com

Type	Qty.	Order No.
UR20-FBC-PL	1	1334940000

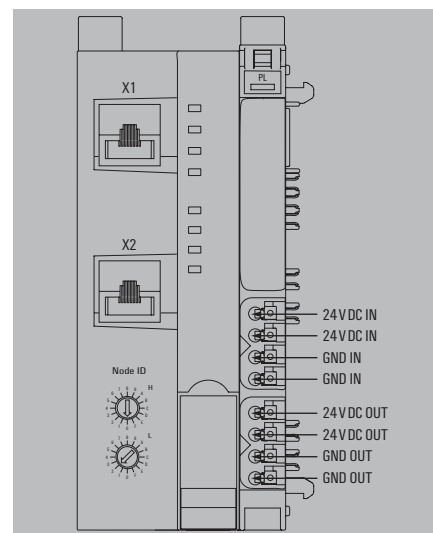
A termination kit (UR20-EBK-ACC) is included in the coupler package

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000

UR20-PK-1334940000-SP

5

2425170000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334940000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital input modules

P- or N-switching; Reverse polarity protection, up to 3-wire +FE

Digital input modules from Weidmüller are available in different versions and are used primarily to receive binary control signals from sensors, transmitters, switches or proximity switches. Thanks to their flexible design, they will satisfy your need for well co-ordinated project planning with reserve potential.

All modules are available with 4, 8 or 16 inputs and comply fully with IEC 61131-2. The digital input modules are available as P- or N-switching variant. The digital inputs are for Type 1 and Type 3 sensors in accordance with the standard. With a maximum input frequency of up to 1 kHz, they are used in many different applications. The variant for PLC interface units enables rapid cabling to the proven Weidmüller interface sub-assemblies using system cables. This ensures rapid incorporation into your overall system. Two modules with a timestamp function are able to capture binary signals and to provide a timestamp in 1 μ s resolution. Further solutions are possible with the module UR20-4DI-2W-230V-AC which works with accurate current up to 230 V as an input signal.

The module electronics supply the connected sensors from the input current path (U_{IN}).

UR20-4DI-P



UR20-4DI-P-3W



UR20-8DI-P-2W



UR20-8DI-P-3W



UR20-8DI-P-3W-HD



UR20-16DI-P



UR20-16DI-P-PLC-INT



UR20-2DI-P-TS



UR20-4DI-P-TS



UR20-4DI-N



UR20-8DI-N-3W



UR20-16DI-N



UR20-16DI-N-PLC-INT



UR20-4DI-2W-230V-AC



UR20-8DI-ISO-2W



4DI-P

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-4DI-P**Technical data**

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	< 10 mA
Digital inputs	
Number of digital inputs	4
Type	Types 1 and 3, EN 61131-2
Input filter	configurable
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	Yes
Sensor connection	2-wire, 3-wire, 3-wire + FE
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
General data	
Weight	87 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

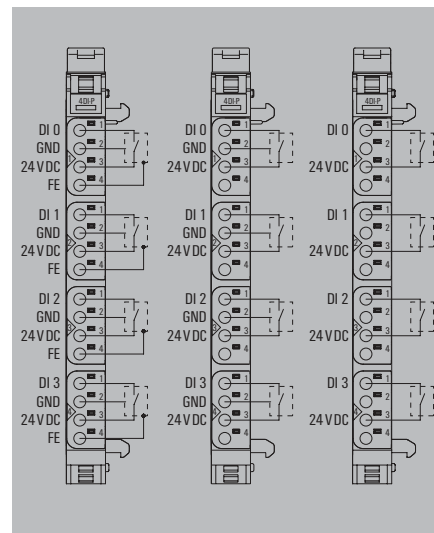
Module variants	
	Digital input module, 4 channels
Note	

Accessories

Termination kit	
Swivel marker	
Connection marker for pusher neutral	
Connection marker for pusher custom printing	
Module marker for custom printing	
Module marker for neutral	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
UR20-4DI-P	1	1315170000

Type	Qty.	Order No.
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC NE WS	960	1323710000
PM 2.7/2.6 MC SDR	192	1323700000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
UR20-EM-1315170000-SP	1	1346640000
UR20-BM-SP	5	1350930000
UR20-PK-1315170000-SP	5	1346440000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315170000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital input modules

4DI-P-3W

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-4DI-P-3W



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	< 10 mA
Digital inputs	
Number of digital inputs	4
Type	Types 1 and 3, EN 61131-2
Input filter	configurable
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	Yes
Sensor connection	2-wire, 3-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
General data	
Weight	84 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

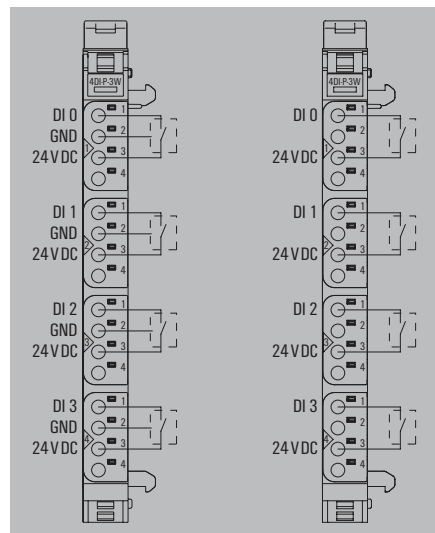
Module variants	
	Digital input module, 4 channels, 3-wire
Note	

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-4DI-P-3W	1	2009360000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-2009360000-SP	1	2011260000
UR20-BM-SP	5	1350930000
UR20-PK-2009360000-SP	5	2011240000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

8DI-P-2W

- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire connection
- Input filter can be set channel by channel
- Types 1 and 3 acc. to IEC 61131-2

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Digital inputs

Number of digital inputs
Type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**UR20-8DI-P-2W**

u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
30 mA
8
Types 1 and 3, EN 61131-2
configurable
< 5 V
> 11 V
Yes
2-wire
Yes
Yes
No

85 g
120 mm / 11.5 mm / 76 mm

Ordering data**Module variants**

Digital input module, 8 channels, 2-wire

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

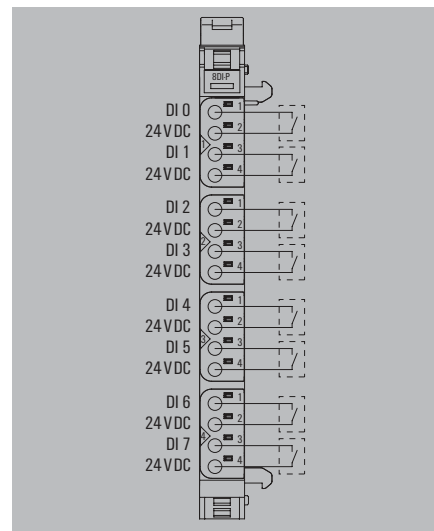
Note

Type	Qty.	Order No.
UR20-8DI-P-2W	1	1315180000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315180000-SP	1	1490220000
UR20-BM-SP	5	1350930000
UR20-PK-1315180000-SP	5	1346430000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP MSIP-REM-WMG-1315180000
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

Digital input modules

8DI-P-3W

- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-8DI-P-3W



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	< 22 mA + sensor feed
Digital inputs	
Number of digital inputs	8
Type	Types 1 and 3, EN 61131-2
Input filter	configurable
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	Yes
Sensor connection	2-wire, 3-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
General data	
Weight	83 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants	
	Digital input module, 8 channels, 3-wire
Note	

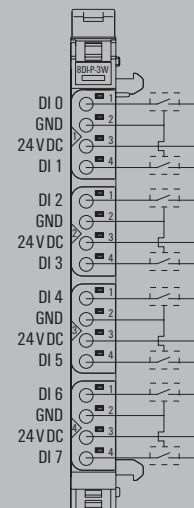
Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Interface	u-remote system bus	
Transmission speed of system bus, max.	48 Mbit	
Galvanic isolation	500 V DC between the current paths	
Supply		
Voltage supply	24 V DC +20 %/-15 %, via the system bus	
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA	
Current consumption I_M (the respective power segment)	< 22 mA + sensor feed	
Digital inputs		
Number of digital inputs	8	
Type	Types 1 and 3, EN 61131-2	
Input filter	configurable	
Input voltage, low	< 5 V	
Input voltage, high	> 11 V	
Sensor supply	Yes	
Sensor connection	2-wire, 3-wire	
Reverse polarity protection	Yes	
Module diagnosis	Yes	
Individual channel diagnosis	No	
General data		
Weight	83 g	
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-8DI-P-3W	1	1394400000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1394400000-SP	1	1346650000
UR20-BM-SP	5	1350930000
UR20-PK-1394400000-SP	5	1411430000
Note		
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1394400000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

8DI-P-3W-HD

- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Digital inputs

Number of digital inputs
Type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital input module, 8 channels, 3-wire, HD plug

Note**Accessories**

Coding elements
Termination kit
Swivel marker
*) HD plug
*) Stripping tool
*) Pressing tool
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-8DI-P-3W-HD**

Note: Please order connector separately

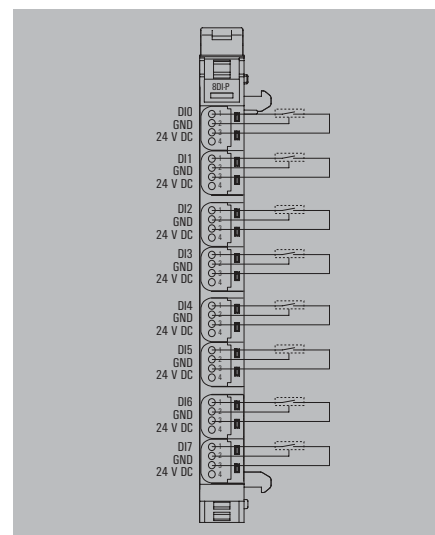
u-remote system bus
48 Mbit
DC 500 V between current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
< 22 mA + sensor feed
8
Types 1 and 3, EN 61131-2
configurable
< 5 V
> 11 V
Yes
2-wire, 3-wire
Yes
Yes
No
66 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-8DI-P-3W-HD	1	1315190000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PG0.35	8	1469340000
MULTI-STRIPAX 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

Type	Qty.	Order No.
UR20-EM-1315190000-SP	1	1346670000
UR20-BM-SP	5	1350930000
UR20-PK-1315190000-SP	5	1518800000

Note: please order plug (1469340000) separately.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315190000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital input modules

16DI-P

- 16 digital inputs
- Positive switching
- Reverse polarity protection
- 1-wire connection
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

UR20-16DI-P



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	< 15 mA
Digital inputs	
Number of digital inputs	16
Type	Types 1 and 3, EN 61131-2
Input filter	3 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	No
Sensor connection	Single-conductor
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
General data	
Weight	87 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

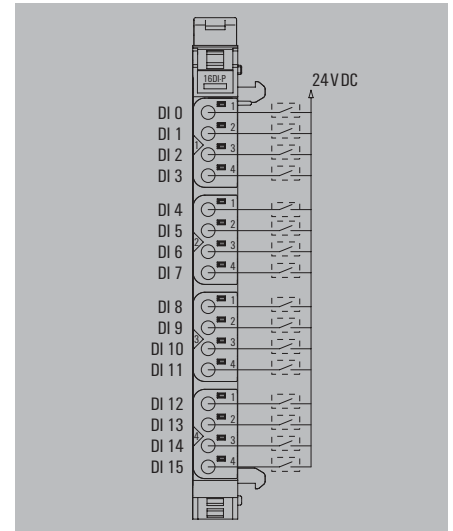
Module variants	
	Digital input module, 16 channels
Note	

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-16DI-P	1	1315200000

Type	Qty.	Order No.
KOSM BHZ.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315200000-SP	1	1346680000
UR20-BM-SP	5	1350930000
UR20-PK-1315200000-SP	5	1346400000
1 roll = 1000 label = 1 Qty.		
1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315200000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

16DI-P-PLC-INT

- 16 digital inputs
- Positive switching
- Reverse polarity protection
- for connecting a PLC interface element
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption I_M (the respective power segment)	
Digital inputs	
Number of digital inputs	
Type	
Input filter	
Input voltage, low	
Input voltage, high	
Sensor supply	
Sensor connection	
Reverse polarity protection	
Module diagnosis	
Individual channel diagnosis	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
Digital input module, 16 channels, PLC interface	
Note	

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
PLC interface element	
Pre-assembled cable, 1m	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

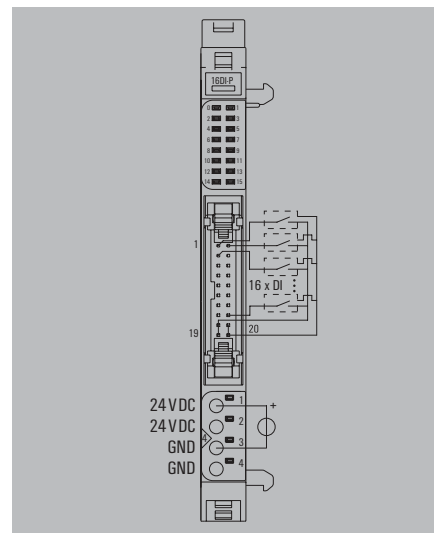
UR20-16DI-P-PLC-INT

u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
< 15 mA	
16	
Types 1 and 3, EN 61131-2	
3 ms	
< 5 V	
> 11 V	
external	
PLC-Interface	
Yes	
Yes	
No	
85 g	
120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-16DI-P-PLC-INT	1	1315210000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESD UR20 DIN A4 WS	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010

UR20-EM-1315210000-SP	1	1346690000
UR20-BM-SP	5	1350930000
UR20-PK-1315210000-SP	5	1346590000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315210000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital input modules

2DI-P-TS

- 2 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Types 1 and 3 acc. to IEC 61131-2
- 1 µs Timestamp resolution

UR20-2DI-P-TS



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	< 10 mA + sensor feed
Digital inputs	
Number of digital inputs	2
Type	Types 1 and 3, EN 61131-2
Input filter	configurable
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	Yes
Sensor connection	2-wire, 3-wire, 3-wire + FE
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Time stamp data width	16 Bit
Time stamp resolution	1 µs
General data	
Weight	83 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

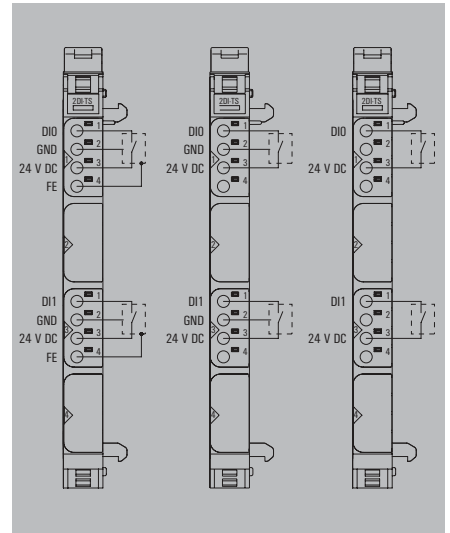
Module variants	
Digital input module, 2 channels, Timestamp	
Note	

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
UR20-2DI-P-TS	1	1460140000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1460140000-SP	1	1463690000
UR20-BM-SP	5	1350930000
UR20-PK-1460140000-SP	5	1484110000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1460140000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4DI-P-TS

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Types 1 and 3 acc. to IEC 61131-2
- 1 µs Timestamp resolution

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption I_M (the respective power segment)	
Digital inputs	
Number of digital inputs	
Type	
Input filter	
Input voltage, low	
Input voltage, high	
Sensor supply	
Sensor connection	
Reverse polarity protection	
Module diagnosis	
Individual channel diagnosis	
Time stamp data width	
Time stamp resolution	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
Digital input module, 4 channels, Timestamp	
Note	

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

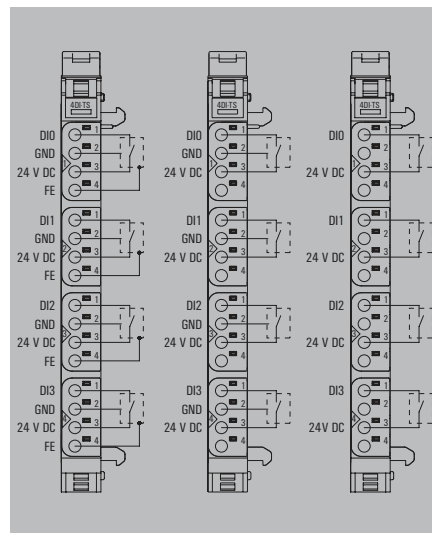
UR20-4DI-P-TS



u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
< 12 mA + sensor feed	
4	
Types 1 and 3, EN 61131-2	
configurable	
< 5 V	
> 11 V	
Yes	
2-wire, 3-wire, 3-wire + FE	
Yes	
Yes	
No	
16 Bit	
1 µs	
87 g	
120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-4DI-P-TS	1	1460150000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1460150000-SP	1	1463680000
UR20-BM-SP	5	1350930000
UR20-PK-1460150000-SP	5	1484430000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1460150000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital input modules

4DI-N

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Negative switching
- Reverse polarity protection
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-4DI-N



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_N (power segment of the field bus coupler), typ.	8 mA
Current consumption I_N (the respective power segment)	< 10 mA
Digital inputs	
Number of digital inputs	4
Type	Types 1 and 3, EN 61131-2
Input filter	configurable
Input voltage, low	> -5 V referred to +24 V of the input power supply U_N
Input voltage, high	< -11 V referred to +24 V of the input power supply U_N
Sensor supply	Yes
Sensor connection	2-wire, 3-wire, 3-wire + FE
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
General data	
Weight	87 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

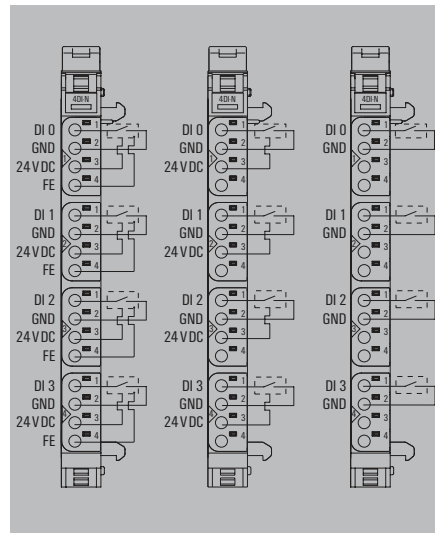
Module variants	
	Digital input module, 4 channels
Note	

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-4DI-N	1	1315350000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315350000-SP	1	1346870000
UR20-BM-SP	5	1350930000
UR20-PK-1315350000-SP	5	1559770000
1 roll = 1000 label = 1 Qty.		
1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315350000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

8DI-N-3W

- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Negative switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_N (power segment of the field bus coupler), typ.
Current consumption I_N (the respective power segment)

Digital inputs

Number of digital inputs
Type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital input module, 8 channels, 3-wire

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-8DI-N-3W**

u-remote system bus
48 Mbit
500 V DC between the current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
< 20 mA

8
Types 1 and 3, EN 61131-2
configurable
> -5 V referred to +24 V of the input power supply U_N
< -11 V referred to +24 V of the input power supply U_N
Yes
2-wire, 3-wire
Yes
Yes
No

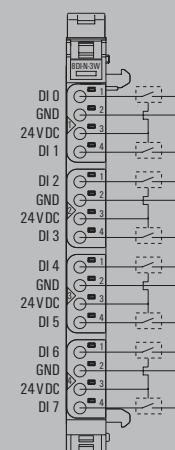
83 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-8DI-N-3W	1	1315370000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315370000-SP	1	1346880000
UR20-BM-SP	5	1350930000
UR20-PK-1315370000-SP	5	1559780000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315370000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital input modules

16DI-N

- 16 digital inputs
- Negative switching
- Reverse polarity protection
- 1-wire connection
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

UR20-16DI-N



Technical data

System data

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_N (power segment of the field bus coupler), typ.
Current consumption I_N (the respective power segment)

Digital inputs

Number of digital inputs
Type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note

u-remote system bus
48 Mbit
500 V DC between the current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
< 15 mA

16
Types 1 and 3, EN 61131-2
3 ms
> -5 V referred to +24 V of the input power supply U_N
< -11 V referred to +24 V of the input power supply U_N
No
Single-conductor
Yes
Yes
No

86 g
120 mm / 11.5 mm / 76 mm

Ordering data

Module variants

Digital input module, 16 channels

Note

Type	Qty.	Order No.
UR20-16DI-N	1	1315390000

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

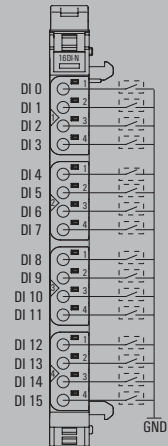
Electronic module
Basic module
Plug-in connector unit

Note

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315390000-SP	1	1346920000
UR20-BM-SP	5	1350930000
UR20-PK-1315390000-SP	5	1559790000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP MSIP-REM-WMG-1315390000
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

16DI-N-PLC-INT

- 16 digital inputs
- Negative switching
- Reverse polarity protection
- For connecting a PLC interface element
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_N (power segment of the field bus coupler), typ.
Current consumption I_N (the respective power segment)

Digital inputs

Number of digital inputs
Type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital input module, 16 channels, PLC interface

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
PLC interface element
Pre-assembled cable, 1m

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-16DI-N-PLC-INT**

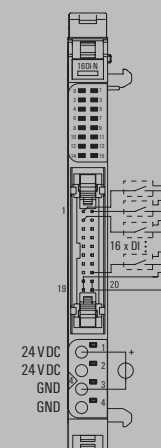
u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
< 15 mA
16
Types 1 and 3, EN 61131-2
3 ms
> -5 V referred to +24 V of the input power supply U_N
< -11 V referred to +24 V of the input power supply U_N
external
PLC-Interface
Yes
Yes
No
81 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-16DI-N-PLC-INT	1	1315400000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESD UR20 DIN A4 WS	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010

UR20-EM-1315400000-SP	1	1346930000
UR20-BM-SP	5	1350930000
UR20-PK-1315400000-SP	5	1559800000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP MSIP-REM-WMG-1315400000
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

Digital input modules

8DI-ISO-2W

- 8 digital inputs for sensors
- Insulation up to 500 V
- Reverse polarity protection
- 2-wire connection
- Types 1 and 3 acc. to IEC 61131-2

UR20-8DI-ISO-2W



Technical data

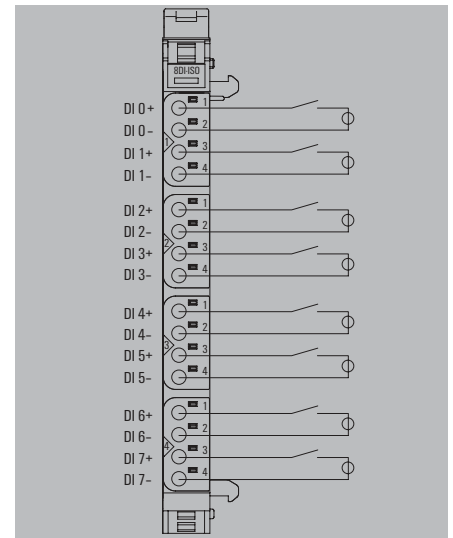
System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	no
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	No
Digital inputs	
Number of digital inputs	8
Type	Types 1 and 3, EN 61131-2
Input filter	Input delay adjustable from 0 to 40 ms
Input voltage, low	< 10 V
Input voltage, high	> 11 V
Sensor supply	No
Sensor connection	2-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Insulation	500 V (channel to channel), 500 V (channel to supply voltage)
General data	
Weight	84 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants		
Type	Qty.	Order No.
UR20-8DI-ISO-2W	1	2457240000
Note		

Accessories

Coding elements	KOSM BHZ5.00	100 1483050000
Termination kit	UR20-EBK-ACC	5 1346610000
Swivel marker	UR20-SM-ACC	20 1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192 1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960 1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100 1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500 1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE	1 1429910000
Thermotransfer version (material: polyester)	THM UR20 WS	1 1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS	10 1429430000
PLC interface element	RS 16IO 1W H S	1 9445700000
Pre-assembled cable, 1m	PAC-UNIV-HE20-LCH-1M	1 7789306010
Replacement parts		
Electronic module	UR20-EM-2457240000-SP	1 2545780000
Basic module	UR20-BM-SP	5 1350930000
Plug-in connector unit	UR20-PK-2457240000-SP	5 2545760000
Note		
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	
MSIP	MSIP-REM-WMG-2457240000

4DI-2W-230V-AC

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Input filter can be set channel by channel
- Galvanic isolation by 4 kV
- Positive switching
- 2-wire connection
- Types 3 acc. to IEC 61131-2

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation
Line-to-line voltage

Supply

Voltage supply
Current consumption I_m (power segment of the field bus coupler), typ.

Digital inputs

Number of digital inputs
Type
Input filter
Input voltage, low
Input voltage, high
Supply voltage (input)
Input frequency
Sensor supply
Sensor connection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital input module, 4 channels, 230V AC

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4DI-2W-230V-AC**

u-remote system bus
48 Mbit
4 kV between channels and power supply
400 V is possible between the channels

24 V DC +20 %/-15 %, via the system bus
8 mA

4
Types 1 and 3, EN 61131-2
configurable, 10 ms
< 65 V
≥ 80 V
277 V AC (UL), 265 V AC (VDE)
50 Hz, 60 Hz
No
2-wire
Yes
No

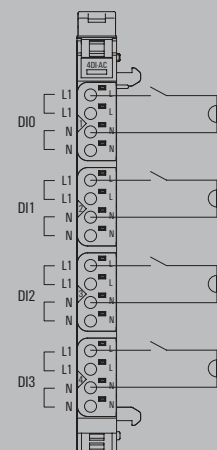
89 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4DI-2W-230V-AC	1	1550070000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1550070000-SP	1	1558880000
UR20-BM-SP	5	1350930000
UR20-PK-1550070000-SP	5	1559820000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP MSIP-REM-WMG-1550070000
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

Digital output modules

P- or N-switching; short-circuit-proof; up to 3-wire+FE

Digital output modules are available in the following variants: 4DO, 8DO with 2-wire technology, 16DO with or without PLC interface connection. They are used primarily for incorporating decentralised actuators. The digital output modules are available as P- or N-switching variant. All outputs are designed for DC-13 actuators acc. to DIN EN 60947-5-1 and IEC 61131-2 specifications. Just like the digital input modules, frequencies of up to 1 kHz are possible. Maximum system safety is ensured by protecting the outputs. This consists of an automatic restart following a short-circuit. Clearly recognisable LEDs also signal the status of the entire module as well as individual channels.

In addition to the standard applications of the digital output modules, the portfolio also includes special variants, such as the 4RO-SSR module for rapidly switching applications. Fitted with solid state technology, 0.5 A is available for each output. Furthermore, there is also the 4RO-CO relay module for power-intensive applications. This is equipped with four change-over contacts, optimised for a switching voltage of 277 V AC and designed for a switching current of 6 A. To serve negative switching requirements there is a parameterisable version of the 4-DO Module.

The module electronics supply the connected actuators from the output current path (U_{OUT}).

UR20-4DO-P



UR20-4DO-P-2A



UR20-4DO-PN-2A



UR20-8DO-P



UR20-8DO-P-2W-HD



UR20-16DO-P



UR20-16DO-P-PLC-INT



UR20-4DO-N



UR20-4DO-N-2A



UR20-8DO-N



UR20-16DO-N



UR20-16DO-N-PLC-INT



UR20-4DO-IS0-4A



UR20-4RO-SSR-255



UR20-4RO-CO-255



4DO-P

- 4 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_{in} (power segment of the field bus coupler), typ.	
Current consumption from I_{out} (the respective power segment)	
Digital outputs	
Number of digital outputs	
Type	
Max. response time, high	
Max. response time, low	
Output current per channel, max.	
Output current per module, max.	
Switching frequenz max. Resistive load (min. 47 Ω)	
Switching frequenz max. Inductive load (DC13)	
Switching frequenz max. Lamp load (12 W)	
Actuator connection	
Short-circuit-proof	
Feedback-free	
Module diagnosis	
Individual channel diagnosis	
Switch-off energy (inductive)	
Response time of the protective circuit (current limiting)	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
Digital output module, 4 channels	
Note	

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

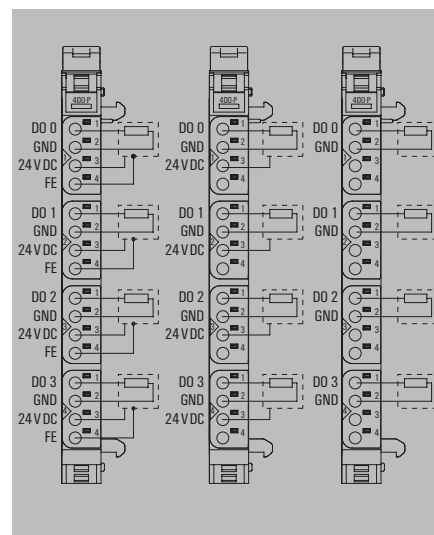
UR20-4DO-P



u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
10 mA + load	
4	
Lamp load, Ohmic, Inductive	
100 μ s	
250 μ s	
500 mA	
2000 mA	
1 kHz	
0.2 Hz	
1 kHz	
2-wire, 3-wire, 3-wire + FE	
Yes (thermal cut-out)	
Yes	
Yes	
No	
< 150 mJ / channel	
< 100 μ s	
86 g	
120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-4DO-P	1	1315220000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315220000-SP	1	1346700000
UR20-BM-SP	5	1350930000
UR20-PK-1315220000-SP	5	1483960000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315220000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital output modules

4DO-P-2A

- 4 digital outputs
- Module can be loaded up to 8 A
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

UR20-4DO-P-2A



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_{in} (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{out} (the respective power segment)	10 mA + load
Digital outputs	
Number of digital outputs	4
Type	Lamp load, Ohmic, Inductive
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	2000 mA
Output current per module, max.	8000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	0.2 Hz
Switching frequenz max. Lamp load (12 W)	1 kHz
Actuator connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	Yes (thermal cut-out)
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	85 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

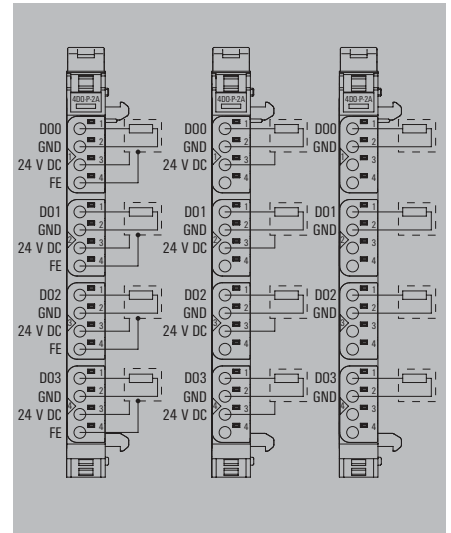
Module variants
Digital output module, 4 channels, 2 A
Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
UR20-4DO-P-2A	1	1315230000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315230000-SP	1	1346710000
UR20-BM-SP	5	1350930000
UR20-PK-1315230000-SP	5	1483970000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315230000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4DO-PN-2A

- 4 digital outputs
- Module can be loaded up to 8 A
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- Positive or negative switching
- 2-wire, 3-wire, 3-wire+FE connection
- IEC 61131-2 compliant

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption from I_{OUT} (the respective power segment)	
Digital outputs	
Number of digital outputs	
Positive or negative switching	
Type	
Max. response time, high	
Max. response time, low	
Output current per channel, max.	
Output current per module, max.	
Switching frequenz max. Resistive load (min. 47 Ω)	
Switching frequenz max. Inductive load (DC13)	
Switching frequenz max. Lamp load (12 W)	
Actuator connection	
Short-circuit-proof	
Feedback-free	
Module diagnosis	
Individual channel diagnosis	
Switch-off energy (inductive)	
Response time of the protective circuit (current limiting)	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
	Digital output module, 4 channels
Note	

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

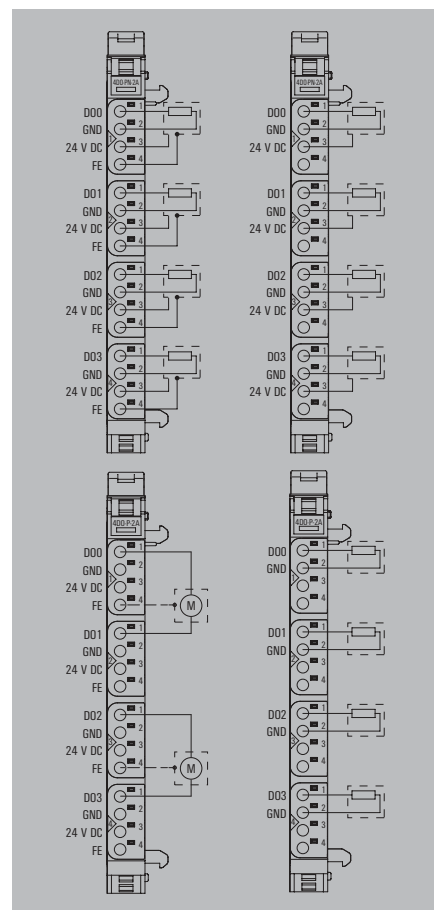
UR20-4DO-PN-2A



u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
10 mA + load	
4	
Positive or negative switching	
Inductive, Ohmic, Lamp load	
100 μ s	
250 μ s	
2 A	
8000 mA	
1 kHz	
2 Hz	
1 kHz	
2-wire, 3-wire, 3-wire + FE	
Yes (thermal cut-out)	
Yes	
Yes	
No	
< 150 mJ / channel	
< 100 μ s	
85 g	
120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-4DO-PN-2A	1	1394420000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1394420000-SP	1	1480950000
UR20-BM-SP	5	1350930000
UR20-PK-1394420000-SP	5	1483980000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1394420000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital output modules

8DO-P

- 8 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

UR20-8DO-P



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_{IN} (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	15 mA + load
Digital outputs	
Number of digital outputs	8
Type	Lamp load, Ohmic, Inductive
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	500 mA
Output current per module, max.	4000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	0.2 Hz
Switching frequenz max. Lamp load (12 W)	1 kHz
Actuator connection	2-wire
Short-circuit-proof	Yes (thermal cut-out)
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	87 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

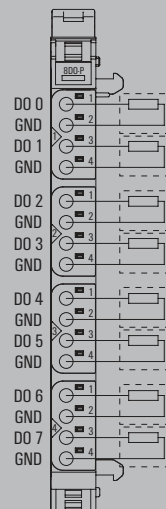
Module variants	
Digital output module, 8 channels	
Note	

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
UR20-8DO-P	1	1315240000
For this and additional technical data, please refer to the manual available at www.weidmueller.de .		

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315240000-SP	1	1346720000
UR20-BM-SP	5	1350930000
UR20-PK-1315240000-SP	5	1346410000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315240000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

8DO-P-2W-HD

- 8 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_{IN} (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Digital outputs

Number of digital outputs
Type
Max. response time, high
Max. response time, low
Output current per channel, max.
Output current per module, max.
Switching frequency max. Resistive load (min. 47 Ω)
Switching frequency max. Inductive load (DC13)
Switching frequency max. Lamp load (12 W)
Actuator connection
Short-circuit-proof
Feedback-free
Module diagnosis
Individual channel diagnosis
Switch-off energy (inductive)
Response time of the protective circuit (current limiting)

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital output module, 8 channels, HD-plug

Note**Accessories**

Coding elements
Termination kit
Swivel marker
*) HD plug
) Stripping tool
) Pressing tool
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-8DO-P-2W-HD**

Note: Please order connector separately

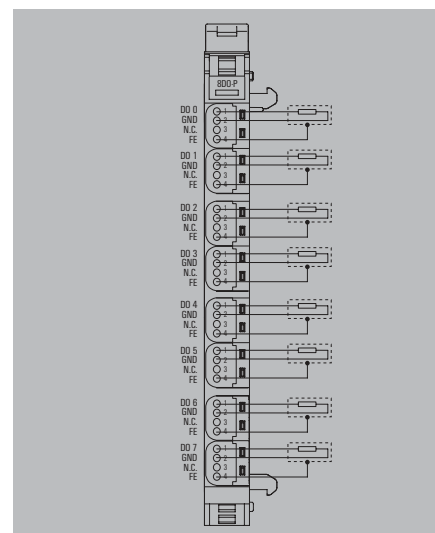
u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
40 mA
8
Lamp load, Ohmic, Inductive
50 μ s
100 μ s
500 mA
4000 mA
1 kHz
0.2 Hz
1 kHz
2-wire
Yes (thermal cut-out)
Yes
Yes
No
< 150 mJ / channel
< 100 μ s
66 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-8DO-P-2W-HD	1	1509830000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PG0.35	8	1469340000
MULTI-STRIPAX 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1509830000-SP	1	1515450000
UR20-BM-SP	5	1350930000
UR20-PK-1509830000-SP	5	1559720000

Note: please order plug (1469340000) separately.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1509830000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital output modules

16DO-P

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 1-wire connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

UR20-16DO-P



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_{IN} (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	20 mA + load
Digital outputs	
Number of digital outputs	16
Type	Ohmic, Inductive, Lamp load
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	500 mA
Output current per module, max.	8000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	0.2 Hz
Switching frequenz max. Lamp load (12 W)	1 kHz
Actuator connection	Single-conductor
Short-circuit-proof	Yes (thermal cut-out)
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	83 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

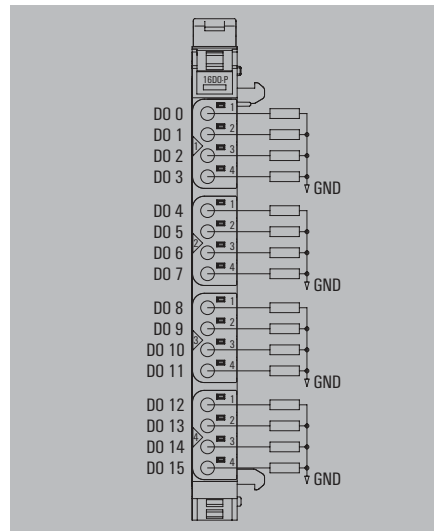
Module variants
Digital output module, 16 channels
Note

Accessories

Accessories
Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
UR20-16DO-P	1	1315250000
For this and additional technical data, please refer to the manual available at www.weidmueller.de .		

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315250000-SP	1	1346730000
UR20-BM-SP	5	1350930000
UR20-PK-1315250000-SP	5	1483990000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315250000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

16DO-P-PLC-INT

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- For connecting a PLC interface element
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption from I_{OUT} (the respective power segment)	
Digital outputs	
Number of digital outputs	
Type	
Max. response time, high	
Max. response time, low	
Output current per channel, max.	
Output current per module, max.	
Switching frequenz max. Resistive load (min. 47 Ω)	
Switching frequenz max. Inductive load (DC13)	
Switching frequenz max. Lamp load (12 W)	
Actuator connection	
Short-circuit-proof	
Feedback-free	
Module diagnosis	
Individual channel diagnosis	
Switch-off energy (inductive)	
Response time of the protective circuit (current limiting)	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants
Digital output module, 16 channels, PLC interface
Note

Accessories

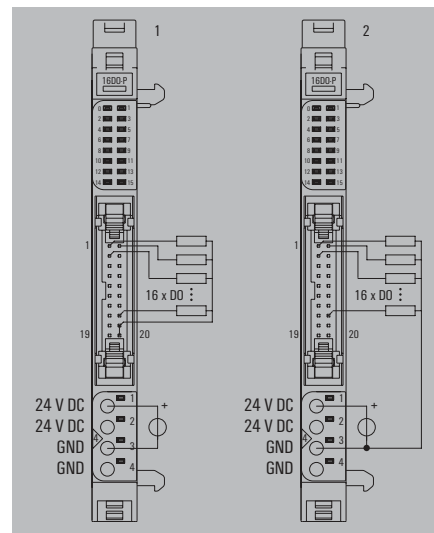
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

UR20-16DO-P-PLC-INT

u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
20 mA + load	
16	
Lamp load, Ohmic, Inductive	
100 μ s	
250 μ s	
500 mA	
8000 mA	
1 kHz	
0.2 Hz	
1 kHz	
PLC-Interface	
Yes (thermal cut-out)	
Yes	
Yes	
No	
< 150 mJ / channel	
< 100 μ s	
85 g	
120 mm / 11.5 mm / 76 mm	
In case of supply via the ribbon cable, the maximum output current per module is 2 A.	

Type	Qty.	Order No.
UR20-16DO-P-PLC-INT	1	1315270000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010
UR20-EM-1315270000-SP		
UR20-EM-1315270000-SP	1	1346740000
UR20-BM-SP		
UR20-BM-SP	5	1350930000
UR20-PK-1315270000-SP		
UR20-PK-1315270000-SP	5	1483940000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315270000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital output modules

4DO-N

- 4 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

UR20-4DO-N



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_{IN} (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	10 mA + load
Digital outputs	
Number of digital outputs	4
Type	Lamp load, Ohmic, Inductive
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	500 mA
Output current per module, max.	2000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	2 Hz
Switching frequenz max. Lamp load (12 W)	10 Hz
Actuator connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	Yes
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	85 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

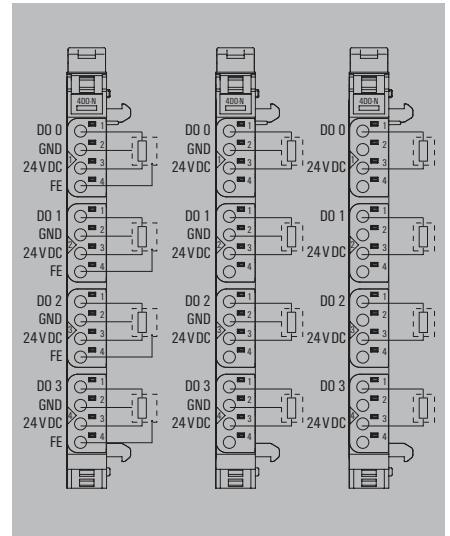
Module variants
Digital output module, 4 channels
Note

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-4DO-N	1	1315410000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315410000-SP	1	1346940000
UR20-BM-SP	5	1350930000
UR20-PK-1315410000-SP	5	1559840000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315410000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4DO-N-2A

- 4 digital outputs
- Module can be loaded up to 8 A
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_{in} (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{out} (the respective power segment)	10 mA + load
Digital outputs	
Number of digital outputs	4
Type	Lamp load, Ohmic, Inductive
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	2000 mA
Output current per module, max.	8000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	2 Hz
Switching frequenz max. Lamp load (12 W)	10 Hz
Actuator connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	Yes
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	86 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants
Digital output module, 4 channels, 2 A
Note

Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

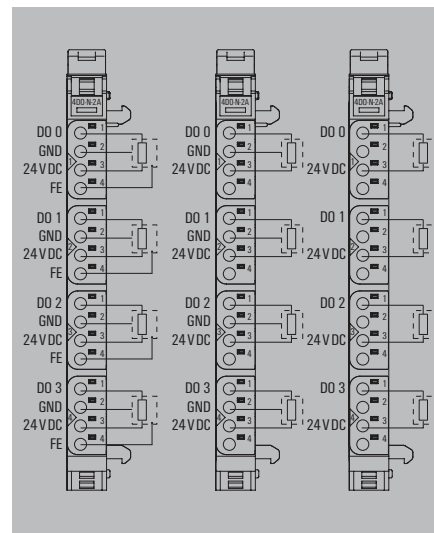
UR20-4DO-N-2A



Technical data		
Interface	u-remote system bus	
Transmission speed of system bus, max.	48 Mbit	
Galvanic isolation	500 V DC between the current paths	
Supply		
Voltage supply	24 V DC +20 %/-15 %, via the system bus	
Current consumption I_{in} (power segment of the field bus coupler), typ.	8 mA	
Current consumption from I_{out} (the respective power segment)	10 mA + load	
Digital outputs		
Number of digital outputs	4	
Type	Lamp load, Ohmic, Inductive	
Max. response time, high	100 μ s	
Max. response time, low	250 μ s	
Output current per channel, max.	2000 mA	
Output current per module, max.	8000 mA	
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz	
Switching frequenz max. Inductive load (DC13)	2 Hz	
Switching frequenz max. Lamp load (12 W)	10 Hz	
Actuator connection	2-wire, 3-wire, 3-wire + FE	
Short-circuit-proof	Yes	
Feedback-free	Yes	
Module diagnosis	Yes	
Individual channel diagnosis	No	
Switch-off energy (inductive)	< 150 mJ / channel	
Response time of the protective circuit (current limiting)	< 100 μ s	
General data		
Weight	86 g	
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm	
Note		

Type	Qty.	Order No.
UR20-4DO-N-2A	1	1315420000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
Replacement parts		
UR20-EM-1315420000-SP	1	1346950000
UR20-BM-SP	5	1350930000
UR20-PK-1315420000-SP	5	1559850000
Note		
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	
Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315420000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital output modules

8DO-N

- 8 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

UR20-8DO-N



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	15 mA + load
Digital outputs	
Number of digital outputs	8
Type	Lamp load, Ohmic, Inductive
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	500 mA
Output current per module, max.	4000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	2 Hz
Switching frequenz max. Lamp load (12 W)	10 Hz
Actuator connection	2-wire
Short-circuit-proof	Yes
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	86 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

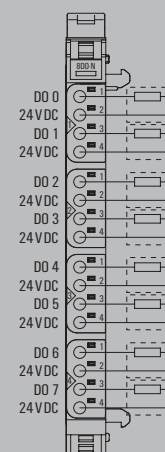
Module variants
Digital output module, 8 channels
Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
UR20-8DO-N	1	1315430000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315430000-SP	1	1346970000
UR20-BM-SP	5	1350930000
UR20-PK-1315430000-SP	5	1984770000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315430000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

16DO-N

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 1-wire connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption from I_{OUT} (the respective power segment)	
Digital outputs	
Number of digital outputs	
Type	
Max. response time, high	
Max. response time, low	
Output current per channel, max.	
Output current per module, max.	
Switching frequenz max. Resistive load (min. 47 Ω)	
Switching frequenz max. Inductive load (DC13)	
Switching frequenz max. Lamp load (12 W)	
Actuator connection	
Short-circuit-proof	
Feedback-free	
Module diagnosis	
Individual channel diagnosis	
Switch-off energy (inductive)	
Response time of the protective circuit (current limiting)	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
	Digital output module, 16 channels
Note	

Accessories

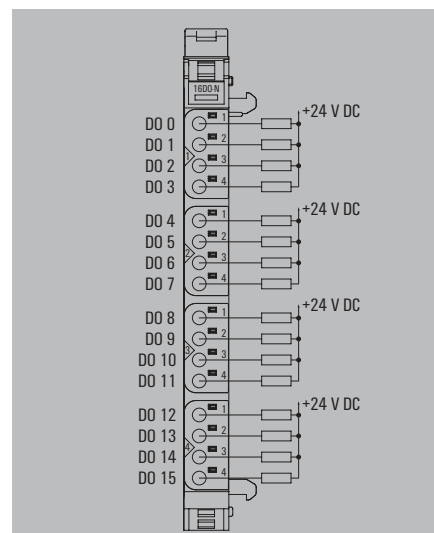
	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

UR20-16DO-N

	u-remote system bus
	48 Mbit
	500 V DC between the current paths
	24 V DC +20 %/-15 %, via the system bus
	8 mA
	40 mA
	16
	Ohmic, Inductive, Lamp load
	100 μ s
	250 μ s
	500 mA
	8000 mA
	1 kHz
	0.2 Hz
	10 Hz
	Single-conductor
	Yes (thermal cut-out)
	Yes
	Yes
	No
	< 150 mJ / channel
	< 100 μ s
	87 g
	120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-16DO-N	1	1315440000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315440000-SP	1	1346980000
UR20-BM-SP	5	1350930000
UR20-PK-1315440000-SP	5	2000520000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315440000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital output modules

16DO-N-PLC-INT

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- For connecting a PLC interface element
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

UR20-16DO-N-PLC-INT



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	30 mA
Digital outputs	
Number of digital outputs	16
Type	Ohmic, Inductive, Lamp load
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	500 mA
Output current per module, max.	8000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	0.2 Hz
Switching frequenz max. Lamp load (12 W)	10 Hz
Actuator connection	PLC-Interface
Short-circuit-proof	Yes (thermal cut-out)
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	87 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants
Digital output module, 16 channels, PLC interface
Note

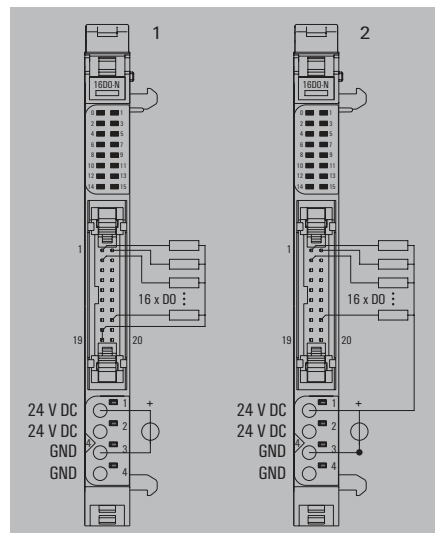
Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
PLC interface element	
Pre-assembled cable, 1m	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	30 mA
Digital outputs	
Number of digital outputs	16
Type	Ohmic, Inductive, Lamp load
Max. response time, high	100 μ s
Max. response time, low	250 μ s
Output current per channel, max.	500 mA
Output current per module, max.	8000 mA
Switching frequenz max. Resistive load (min. 47 Ω)	1 kHz
Switching frequenz max. Inductive load (DC13)	0.2 Hz
Switching frequenz max. Lamp load (12 W)	10 Hz
Actuator connection	PLC-Interface
Short-circuit-proof	Yes (thermal cut-out)
Feedback-free	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Switch-off energy (inductive)	< 150 mJ / channel
Response time of the protective circuit (current limiting)	< 100 μ s
General data	
Weight	87 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Type	Qty.	Order No.
UR20-16DO-N-PLC-INT	1	1315450000
Note		

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010
Replacement parts		
UR20-EM-1315450000-SP	1	1346990000
UR20-BM-SP	5	1350930000
UR20-PK-1315450000-SP	5	2000540000
Note		
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315450000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4DO-ISO-4A

- 4 digital outputs
- Insulation up to 500 V
- Can be loaded up to 4 A per channel
- Short-circuit-proof
- 2-wire connection
- IEC 61131-2 compliant

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Digital outputs

Number of digital outputs
Type
Max. response time, high
Max. response time, low
Output current per channel, max.
Output current per module, max.
Switching frequenz max. Resistive load (min. 47 Ω)
Switching frequenz max. Inductive load (DC13)
Switching frequenz max. Lamp load (12 W)
Actuator connection
Short-circuit-proof
Feedback-free
Module diagnosis
Individual channel diagnosis
Switch-off energy (inductive)
Response time of the protective circuit (current limiting)

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants****Note****Accessories**

Termination kit
Swivel marker
Connection marker for pusher neutral
Connection marker for pusher custom printing
Module marker for custom printing
Module marker for neutral

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4DO-ISO-4A**

u-remote system bus
48 Mbit
500 V DC between the current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
30 mA

4
Lamp load, Ohmic, Inductive
250 μ s
250 μ s
4 A DC / 2 A AC
16 A DC / 8 A AC

1 kHz
2 Hz
10 Hz

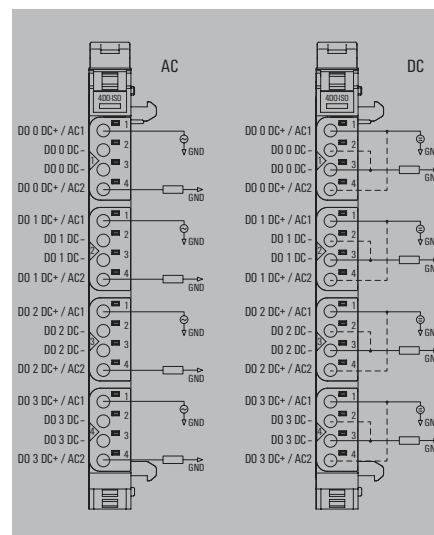
2-wire
Yes
Yes
Yes
No
< 150 mJ / channel
< 100 μ s

91 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4DO-ISO-4A	1	2457250000

Type	Qty.	Order No.
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC NE WS	960	1323710000
PM 2.7/2.6 MC SDR	192	1323700000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000

UR20-EM-2457250000-SP	1	2545790000
UR20-BM-SP	5	1350930000
UR20-PK-2457250000-SP	5	2545770000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	
MSIP	MSIP-REM-WMG-2457250000

Digital output modules

4R0-SSR-255

- 4 digital outputs
- Can be loaded up to 1 A per channel
- Solid state relay

UR20-4R0-SSR-255



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I _{IN} (power segment of the field bus coupler), typ.	8 mA
Current consumption from I _{OUT} (the respective power segment)	< 15 mA
Digital outputs	
Number	4
Type	SSR / Triac
Max. response time, high	10 ms
Max. response time, low	10 ms
Output current per channel, max.	1 A
Output current per module, max.	4 A
Max. switching frequency	40 Hz
Short-circuit-proof	No
Feedback-free	Yes
Switching voltage, max.	255 V AC,UL: 277 V AC
Module diagnosis	Yes
Individual channel diagnosis	No
General data	
Weight	85 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants	
	Digital output module, 4 channels, SSR
Note	

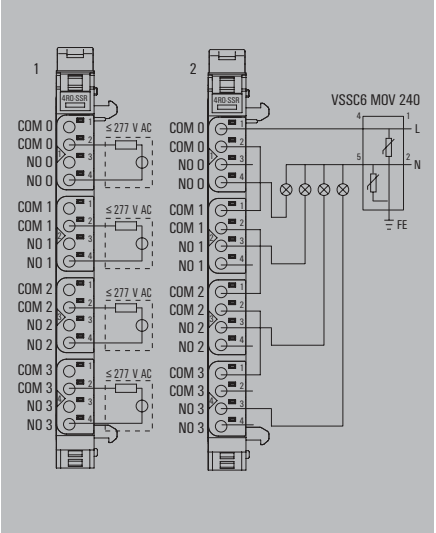
Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

	u-remote system bus
	48 Mbit
	500 V DC between the current paths
	24 V DC +20 %/-15 %, via the system bus
	8 mA
	< 15 mA
	4
	SSR / Triac
	10 ms
	10 ms
	1 A
	4 A
	40 Hz
	No
	Yes
	255 V AC,UL: 277 V AC
	Yes
	No
	85 g
	120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4R0-SSR-255	1	1315540000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315540000-SP	1	1347120000
UR20-BM-SP	5	1350930000
UR20-PK-1315540000-SP	5	1484000000
1 roll = 1000 label = 1 Qty.		
1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315540000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4R0-C0-255

- 4 digital outputs
- Can be loaded up to 6 A per channel
- Relay output, change-over contact
- Switching voltage 277 V AC/DC

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Digital outputs

Number
Type
Max. response time, high
Max. response time, low
Output current per channel, max.
Output current per module, max.
Max. switching frequency
Short-circuit-proof
Feedback-free
Switching voltage, max.
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital output module, 4 channels, relay

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4R0-C0-255**

u-remote system bus
48 Mbit
500 V DC between the current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
< 15 mA

4
C0 contact
20 ms
20 ms

5 A
20 A
5 Hz
No
Yes

277 V AC/DC
Yes
No

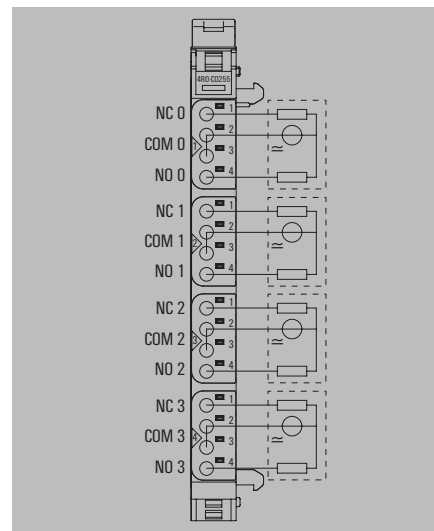
119 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4R0-C0-255	1	1315550000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315550000-SP	1	1347130000
UR20-BM-SP	5	1350930000
UR20-PK-1315550000-SP	5	1346500000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP MSIP-REM-WMG-1315550000
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

Digital input and output modules

8 universally switchable digital inputs/outputs

The automation of machines and plants is usually planned in great detail. The aim is to ensure smooth commissioning and error-free operation. If unexpected changes nevertheless occur, a flexible automation infrastructure is a great advantage.

B

u-remote UR20-8DIO-P-3W-DIAG is a universally applicable digital I/O module in which each individual channel can be parameterised independently as an input or output. Sensors and actuators can be connected to the same module, which reduces the number of modules per I/O station.

In addition, subsequent changes to the system can be made by reconfiguring the system. Adjustable individual channel diagnoses for inputs and outputs increase the transparency of the device or system status.

UR20-8DIO-P-3W-DIAG



8DIO-P-3W-DIAG

- 8 digital inputs and 8 digital outputs
- Overcurrent monitoring and electronic protection
- Overload monitoring
- Line break detection
- 2-wire, 3-wire connection

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Digital inputs

Number of digital inputs
Input type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

Digital outputs

Number of digital outputs
Type
Output current per channel, max.
Output current per module, max.
Switching frequenz max. Resistive load (min. 47 Ω)
Switching frequenz max. Inductive load (DC13)
Switching frequenz max. Lamp load (12 W)
Actuator connection
Short-circuit-proof
Feedback-free
Module diagnosis
Individual channel diagnosis
Switch-off energy (inductive)
Response time of the protective circuit (current limiting)

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital input and output module, 8 channels

Note**Accessories**

Termination kit
Swivel marker
Connection marker for pusher neutral
Connection marker for pusher custom printing
Module marker for custom printing
Module marker for neutral

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-8DIO-P-3W-DIAG**

u-remote system bus
48 Mbit
500 V DC between the current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
32 mA + I-Last

8
P-switching, for Type 1 and Type 3 sensors as per IEC 61131-2
Input delay adjustable from 0 to 40 ms
< +5 V referred to 0 V of the output power supply U_{OUT}
> +11 V referred to 0 V of the output power supply U_{OUT}
 ≥ 0.3 A per connector, limited electronically
2-wire, 3-wire
No, Input voltage below -10 V can destroy the module
Yes
only auxiliary voltage output

8
PNP switched
0.5 A
4 A
1 kHz
0.2 Hz
10 Hz
2-wire, 3-wire
Yes
Yes
Yes
Yes
Yes, Overcurrent monitoring > 0.5 A, line break detection
< 150 mJ / channel
< 100 μ s

83 g
120 mm / 11.5 mm / 76 mm

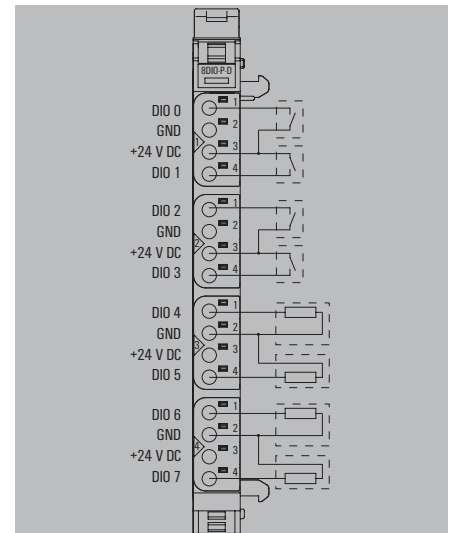
Type	Qty.	Order No.
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UR20-8DIO-P-3W-DIAG	1	2456530000
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Type	Qty.	Order No.
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UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC NE WS	960	1323710000
PM 2.7/2.6 MC SDR	192	1323700000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000

UR20-EM-2456530000-SP	1	2593330000
UR20-BM-SP	5	1350930000
UR20-PK-2456530000-SP	5	2593320000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-2456530000

Pulse width modulation and stepper motor modules

B As part of the u-remote system, Weidmüller offers a specialised solution for controlling small motors with a current requirement of 0.5 A to 2 A, which can also be used to control valve flaps. The pulse width modulation modules can be adjusted within the switching frequencies up to 40 kHz and the modules can also be switched in the motor control with the aid of push/pull output stages, e.g. to change the direction of rotation.

Weidmüller's stepper motor module is efficient and flexible for use in the automation of robots, handling systems or placement machines with stepper motors. Variably adjustable operating parameters as well as a wide range supply from 12 V DC to 50 V DC make the module flexibly applicable for various target applications. Six integrated, parameterizable encoder or digital inputs and two digital outputs with 0.5 A make the control module a complete solution in the smallest of spaces.

As with all modules of the u-remote system, the features are convincing - from the modular design and exchangeable electronics to the removable and pluggable terminal strip. The module electronics supplies the connected actuators from the output current path (U_{OUT}).

UR20-2PWM-PN-0.5A



UR20-2PWM-PN-2A



UR20-1SM-50W-6DI2DO-P



2PWM-PN-0.5A

- 2 pulse width modulation module outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- Push/pull output
- Maximum 40 kHz output frequency (adjustable)

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_{M} (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Digital outputs

Number of digital outputs
Type
Resolution
Accuracy
Max. response time, high
Max. response time, low
Output current per channel, max.
Output current per module, max.
Switching frequency, resistive load
Switching frequency, inductive load
Switching frequency, lamp load
Actuator connection
Short-circuit-proof
Module diagnosis
Individual channel diagnosis
Feedback-free
Pulse duty factor

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital output module, PWM, 2 channels, 0.5 A

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-2PWM-PN-0.5A**

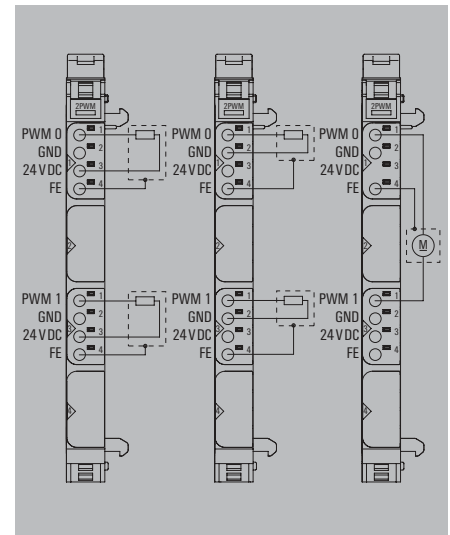
u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
40 mA
2
DO PWM push / pull
32 Bit
1 Bit
100 ns
100 ns
500 mA
1000 mA
Static, 6 Hz ... 40 kHz
Static, 6 Hz ... 40 kHz
Static, 6 Hz ... 40 kHz
2-wire, 3-wire, 3-wire + FE
Yes
Yes
No
Yes
0--100% push/pull or push, parameterisable
85 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-2PWM-PN-0.5A	1	1315600000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315600000-SP	1	1347180000
UR20-BM-SP	5	1350930000
UR20-PK-1315600000-SP	5	1484010000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315600000

Pulse width modulation and stepper motor modules

2PWM-PN-2A

- 2 pulse width modulation module outputs
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- Push/pull output
- Maximum 40 kHz output frequency (adjustable)

UR20-2PWM-PN-2A



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	40 mA
Digital outputs	
Number of digital outputs	2
Type	DO PWM push / pull
Resolution	32 Bit
Accuracy	1 Bit
Max. response time, high	100 ns
Max. response time, low	100 ns
Output current per channel, max.	2000 mA
Output current per module, max.	4000 mA
Switching frequency, resistive load	Static, 6 Hz ... 40 kHz
Switching frequency, inductive load	Static, 6 Hz ... 40 kHz
Switching frequency, lamp load	Static, 6 Hz ... 40 kHz
Actuator connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Feedback-free	Yes
Pulse duty factor	0--100% push/pull or push, parameterisable
General data	
Weight	83 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants	
	Digital output module, PWM, 2 channels, 2 A
Note	

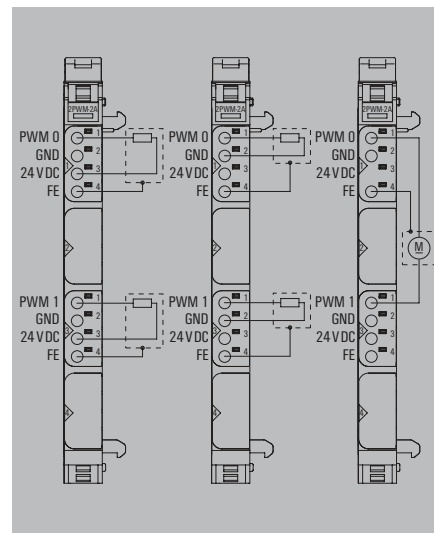
Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	40 mA
Digital outputs	
Number of digital outputs	2
Type	DO PWM push / pull
Resolution	32 Bit
Accuracy	1 Bit
Max. response time, high	100 ns
Max. response time, low	100 ns
Output current per channel, max.	2000 mA
Output current per module, max.	4000 mA
Switching frequency, resistive load	Static, 6 Hz ... 40 kHz
Switching frequency, inductive load	Static, 6 Hz ... 40 kHz
Switching frequency, lamp load	Static, 6 Hz ... 40 kHz
Actuator connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Feedback-free	Yes
Pulse duty factor	0--100% push/pull or push, parameterisable
General data	
Weight	83 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Type	Qty.	Order No.
UR20-2PWM-PN-2A	1	1315610000
Note		

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
Note		
UR20-EM-1315610000-SP	1	1347190000
UR20-BM-SP	5	1350930000
UR20-PK-1315610000-SP	5	1346550000
1 roll = 1000 label = 1 Qty.		
1 sheet = 60 label = 1 Qty.		



Product standard	
Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315610000
Note	

1SM-50W-6DI2DO-P

- Power output stage for drive power up to 50 W
- Supply voltage range from 12 to 50 V DC
- 6 configurable encoder/digital inputs
- 2 digital outputs (0.5 A)
- Up to 256 micro-steps
- Relative and absolute positioning

Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit/s
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %
Current consumption I_{in} (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{out} (the respective power segment)	10 mA + load
Current consumption from external power supply	35 mA + load
Stepper motor connections	
Number of channels	1
Power output stage, max.	50 W
Short-circuit-proof	Yes
Connection type	4-wire
Digital inputs DI 0...DI 3	
Number of channels	4
Input type	P-switching, for Type 1 and Type 3 sensors as per IEC 61131-2
Current supply, sensor	max. 1 A per plug
Sensor connection	2-wire, 3-wire
Reverse polarity protection	Yes
Digital inputs DI 4...DI 5	
Number of channels	2
Input type	Input characteristics for sensor types 1 and 3 are according to EN 61131-2, P-switching
	Yes
Suitable for incremental encoder	100kHz
Input frequency, max.	AB mode with 4-times sampling
Mode of operation	max. 1 A per plug
Current supply, sensor	2-wire, 3-wire
Sensor connection	Yes
Reverse polarity protection	Yes
Digital outputs DO 0...DO 1	
Number of channels	2
Response time low-high, max. / Response time high-low, max.	100µs / 250µs
Output current per channel, max.	0.5A
Actuator connection	2-wire
Short-circuit-proof / Reactionless	Yes / Yes
General data	
Weight / Dimensions H x W x D	173 g / 120 / 23 / 76 mm
Note	

Ordering data

Module variants	
	Stepper motor module, 6 digital inputs, 2 digital outputs
Note	

Accessories

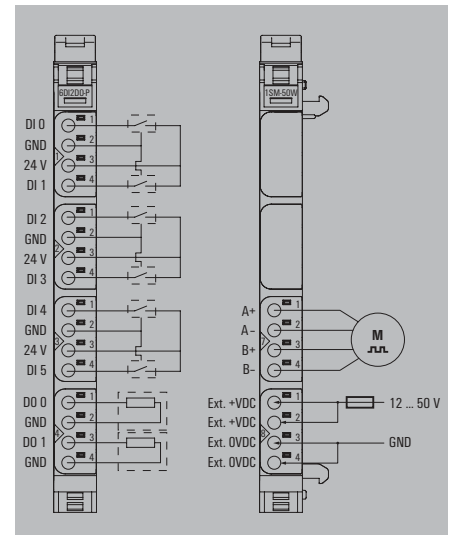
Termination kit	
Swivel marker	
Connection marker for pusher neutral	
Connection marker for pusher custom printing	
Module marker for custom printing	
Module marker for neutral	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Plug-in connector unit	
Note	

UR20-1SM-50W-6DI2DO-P

u-remote system bus		
		48 Mbit/s
DC 500 V between current paths		
		24 V DC +20 %/-15 %
		8 mA
		10 mA + load
		35 mA + load
Stepper motor connections		
		1
		50 W
		Yes
		4-wire
Digital inputs DI 0...DI 3		
		4
		P-switching, for Type 1 and Type 3 sensors as per IEC 61131-2
		max. 1 A per plug
		2-wire, 3-wire
		Yes
Digital inputs DI 4...DI 5		
		2
		Input characteristics for sensor types 1 and 3 are according to EN 61131-2, P-switching
		Yes
		100kHz
		AB mode with 4-times sampling
		max. 1 A per plug
		2-wire, 3-wire
		Yes
Digital outputs DO 0...DO 1		
		2
		100µs / 250µs
		0.5A
		2-wire
		Yes / Yes
General data		
		173 g / 120 / 23 / 76 mm
Note		

Type	Qty.	Order No.
UR20-1SM-50W-6DI2DO-P	1	2489830000

Type	Qty.	Order No.
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC NE WS	960	1323710000
PM 2.7/2.6 MC SDR	192	1323700000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
Replacement parts		
UR20-EM-2489830000-SP	1	2585660000
UR20-BM-SP	5	1350930000
UR20-PK1-2489830000-SP	5	2573750000
UR20-PK2-2489830000-SP	5	2585650000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

Analogue input modules

Input parameters can be set for current or voltage;
up to 3-wire+FE; Accuracy 0.1% FSR

Analogue input modules of the u-remote system are available in many variants with different resolutions and wiring solutions.

Variants are available in a 12- and 16-bit resolution, which record up to 8 analogue sensors with +/-10 V, +/-5 V, 0...10 V, 0...5 V, 2...10 V, 1...5 V, 0...20 mA or 4...20 mA with maximum accuracy. Each plug-in connector has options for connecting sensors with 2-wire, 3-wire and 3-wire+FE technology. The parameters for the measurement range can be individually set for each channel. A separate status LED is also assigned to each channel. A special variant for Weidmüller interface units enables current measurements with a 16-bit resolution at maximum accuracy for 8 sensors at a time (0...20 mA or 4...20 mA).

The module electronics supply the connected sensors from the input current path (U_{IN}).

UR20-4AI-UI-16



UR20-4AI-UI-16-DIAG



UR20-4AI-UI-DIF-16-DIAG



UR20-4AI-UI-DIF-32-DIAG



UR20-4AI-UI-16-HD



UR20-4AI-UI-16-DIAG-HD



UR20-4AI-UI-12



UR20-8AI-I-16-HD



UR20-8AI-I-16-DIAG-HD



UR20-8AI-I-PLC-INT



4AI-UI-12

- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 12-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.25 % FSR

Technical data

System data

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Type

Resolution
Accuracy
Sensor supply
Sensor connection
Conversion time
Internal resistance U
Internal resistance I
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
Short-circuit-proof

General data

Weight
Dimensions H x W x D

Note

Ordering data

Module variants

Analogue input module, 4 channels, 12 bits

Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note

UR20-4AI-UI-12



u-remote system bus

48 Mbit
DC 500 V between current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
25 mA + sensor feed

4
1. U (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V), 2. I (0-20 mA or 4-20 mA), Adjustable input for current or voltage
12-bit
0.1% FSR
Yes
2-wire, 3-wire, 3-wire + FE
1 ms
100 k Ω
41.2 Ω
Yes
Yes
No
Yes

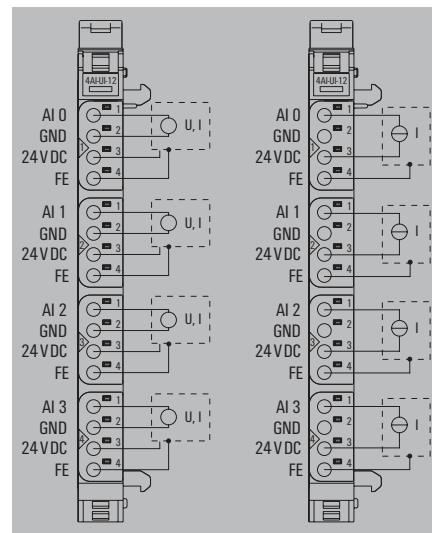
87 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4AI-UI-12	1	1394390000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1394390000-SP	1	1434230000
UR20-BM-SP	5	1350930000
UR20-PK-1394390000-SP	5	1484030000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP MSIP-REM-WMG-1394390000
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

Analogue input modules

4AI-UI-16

- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

UR20-4AI-UI-16



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	25 mA + sensor feed
Analogue inputs	
Number of analogue inputs	4
Type	1. U (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V), 2. I (0-20 mA or 4-20 mA), Adjustable input for current or voltage
Resolution	16 Bit
Accuracy	0.1% FSR
Sensor supply	Yes
Sensor connection	2-wire, 3-wire, 3-wire + FE
Conversion time	1 ms
Internal resistance U	100 k Ω
Internal resistance I	41.2 Ω
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Short-circuit-proof	Yes
General data	
Weight	89 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

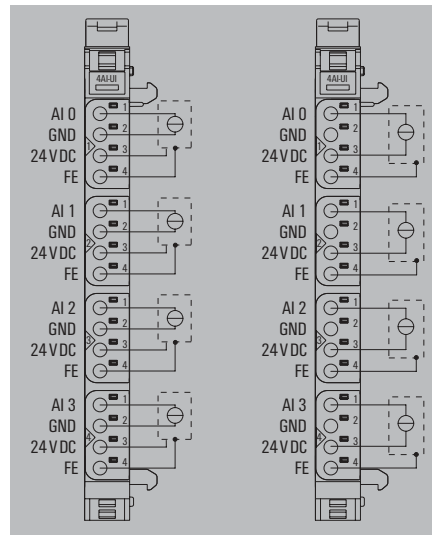
Module variants	
	Analogue input module, 4 channels, 16 bits
Note	

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-4AI-UI-16	1	1315620000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315620000-SP	1	1347200000
UR20-BM-SP	5	1350930000
UR20-PK-1315620000-SP	5	1484020000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315620000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4AI-UI-16-DIAG

- Advanced diagnosis functions
- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Type

Resolution
Accuracy
Sensor supply
Sensor connection
Conversion time
Internal resistance U
Internal resistance I
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
Short-circuit-proof

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue input module, 4 channels, 16 bits, diagnosis functions

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4AI-UI-16-DIAG**

u-remote system bus
48 Mbit
500 V DC between the current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
25 mA + sensor feed

4
1. U (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V), 2. I (0-20 mA or 4-20 mA)
16 Bit
0.1% FSR
Yes
2-wire, 3-wire, 3-wire + FE
1 ms
100 k Ω
41.2 Ω
Yes
Yes
Yes
Yes

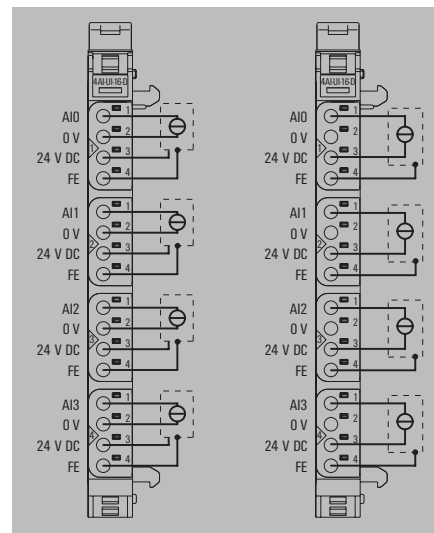
89 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4AI-UI-16-DIAG	1	1315690000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315690000-SP	1	1347280000
UR20-BM-SP	5	1350930000
UR20-PK-1315690000-SP	5	1518870000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315690000

Analogue input modules

4AI-UI-16-HD

- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

UR20-4AI-UI-16-HD



Note: Please order connector separately

Technical data

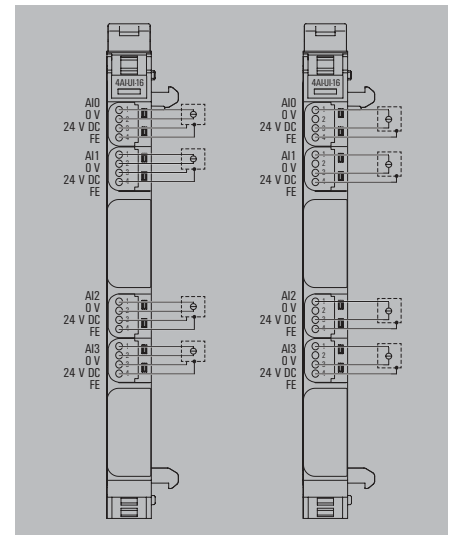
System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	25 mA + sensor feed
Analogue inputs	
Number of analogue inputs	4
Type	1. U (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V), 2. I (0-20 mA or 4-20 mA)
Resolution	16 Bit
Accuracy	0.1% FSR
Sensor supply	Yes
Sensor connection	2-wire, 3-wire, 3-wire + FE
Conversion time	1 ms
Internal resistance U	100 k Ω
Internal resistance I	45 Ω
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Short-circuit-proof	Yes
General data	
Weight	72 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants		
Analogue input module, 4 channels, 16 bits, HD plug		
Note		

Accessories

Type	Qty.	Order No.
Coding elements	100	1483050000
Termination kit	5	1346610000
Swivel marker	20	1339920000
^{*)} HD plug	8	1469340000
^{*)} Stripping tool	1	9202210000
^{*)} Pressing tool	1	1525820000
Module marker for custom printing	100	1341610000
Module marker for neutral	500	1341630000
Thermotransfer version (Material: Polyester)	1	1429910000
Thermotransfer version (material: polyester)	1	1429420000
Paper version for Laserprinter	10	1429430000
Replacement parts		
Electronic module	1	1515420000
Basic module	5	1350930000
Plug-in connector unit	5	1518830000
Note		
Note: please order plug (1469340000) separately.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1506920000

4AI-UI-16-DIAG-HD

- Advanced diagnosis functions
- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Type

Resolution
Accuracy
Sensor supply
Sensor connection
Conversion time
Internal resistance U
Internal resistance I
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
Short-circuit-proof

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue input module, 4 channels, diagnosis functions, HD-plug

Note**Accessories**

Coding elements
Termination kit
Swivel marker
*) HD plug
*) Stripping tool
*) Pressing tool
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4AI-UI-16-DIAG-HD**

Note: Please order connector separately

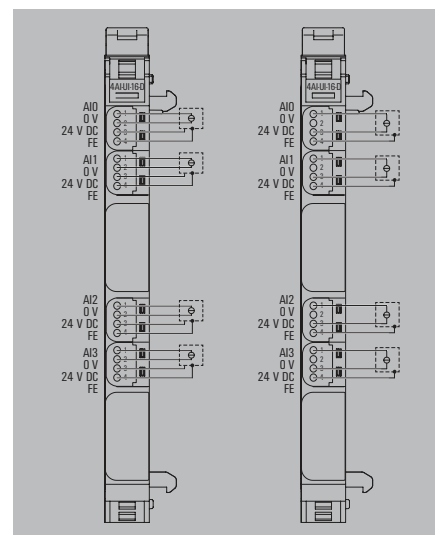
u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
25 mA + sensor feed
4
1. U (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V), 2. I (0-20 mA or 4-20 mA)
16 Bit
0.1% FSR
Yes
2-wire, 3-wire, 3-wire + FE
1 ms
100 k Ω
45 Ω
Yes
Yes
Yes
Yes
72 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4AI-UI-16-DIAG-HD	1	1506910000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
MULTI-STRIPAX 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1506910000-SP	1	1515430000
UR20-BM-SP	5	1350930000
UR20-PK-1506910000-SP	5	1518820000

Note: please order plug (1469340000) separately.



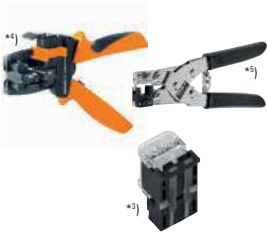
Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1506910000

Analogue input modules

8AI-I-16-HD

- 8 analogue inputs
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR
- HD plug

UR20-8AI-I-16-HD



Note: Please order connector separately

Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	Yes, between field and system bus
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_{M1} (power segment of the field bus coupler), typ.	8 mA
Current consumption I_{M2} (the respective power segment)	20 mA + load
Analogue inputs	
Number of analogue inputs	8
Input value	Current I (0...20 mA, 4...20 mA)
Resolution	16 Bit
Accuracy	0.1% FSR
Sensor supply	Yes
Sensor connection	2-wire, 3-wire, 3-wire + FE
Conversion time	1 ms
Internal resistance I	50 Ω
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Short-circuit-proof	Yes
General data	
Weight	74 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

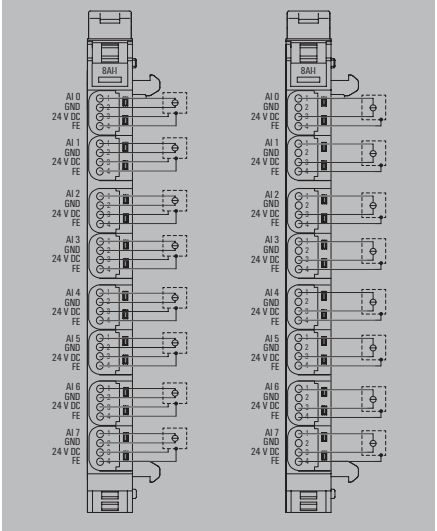
Module variants
Analogue input module, 8 channels, 16 Bits, HD-plug
Note

Accessories

	Coding elements
	Termination kit
	Swivel marker
	*) HD plug
	*) Stripping tool
	*) Pressing tool
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-8AI-I-16-HD	1	1315650000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PG0.35	8	1469340000
MULTI-STRIPAX 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315650000-SP	1	1347240000
UR20-BM-SP	5	1350930000
UR20-PK-1315650000-SP	5	1559740000
Note: please order plug (1469340000) separately.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315650000

8AI-I-16-DIAG-HD

- Advanced diagnosis functions
- 8 analogue inputs
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Input value
Resolution
Accuracy
Sensor supply
Sensor connection
Conversion time
Internal resistance I
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
Short-circuit-proof

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue input module, 4 channels, diagnosis functions, HD-plug

Note**Accessories**

Coding elements
Termination kit
Swivel marker
*) HD plug
) Stripping tool
) Pressing tool
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-8AI-I-16-DIAG-HD**

Note: Please order connector separately

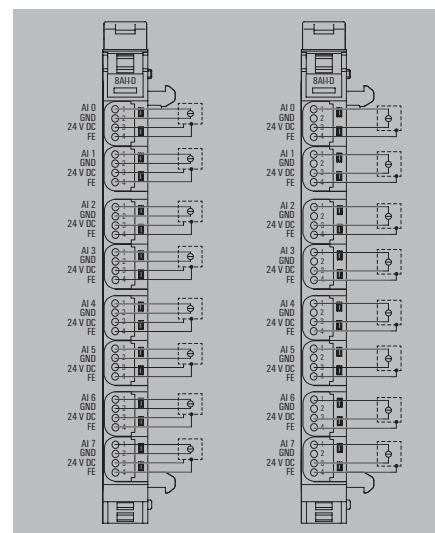
u-remote system bus
48 Mbit
Yes, between field and system bus
24 V DC +20 %/-15 %, via the system bus
8 mA
20 mA + load
8
Current I (0...20 mA, 4...20 mA)
16 Bit
0.1% FSR
Yes
2-wire, 3-wire, 3-wire + FE
1 ms
50 Ω
Yes
Yes
Yes
74 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-8AI-I-16-DIAG-HD	1	1315720000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PG0.35	8	1469340000
MULTI-STRIPAX 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315720000-SP	1	1347320000
UR20-BM-SP	5	1350930000
UR20-PK-1315720000-SP	5	1559750000

Note: please order plug (1469340000) separately.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315720000

Analogue input modules

8AI-PLC-INT

- 8 analogue inputs
- Rapid cabling with flat ribbon cable
- 0/4 to 20 mA with 0.1 % accuracy with a 16-bit resolution
- Inputs can be parameterised (passive or active operating mode)

UR20-8AI-PLC-INT



Technical data

System data

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Type
Resolution
Accuracy
Sensor supply
Sensor connection
Conversion time
Internal resistance I
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
Short-circuit-proof

General data

Weight
Dimensions H x W x D

Note

Ordering data

Module variants

Analogue input module, 8 channels, PLC interface

Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
PLC interface element
Pre-assembled cable, 1m

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note

u-remote system bus

48 Mbit/s

DC 500 V between current paths

24 V DC $\pm 20\%$ / -15% , via the system bus

8 mA

< 20 mA

8

Current input

16 Bit

0.1% FSR

external

PLC interface unit

1 ms

50 Ω

Yes

Yes

No

Yes

85 g

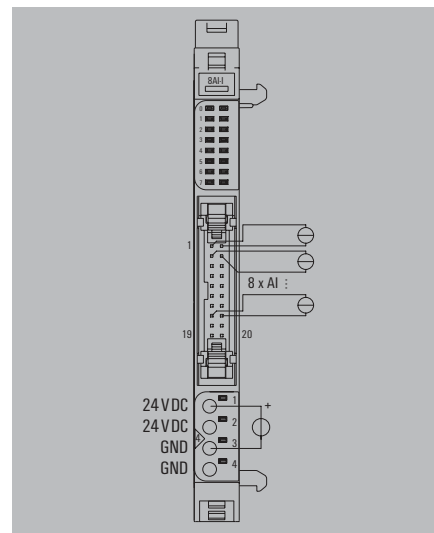
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-8AI-PLC-INT	1	1315670000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESD UR20 DIN A4 WS	10	1429430000
RS F20 LP2N 5/20	1	0224261001
PAC-UNIV-HE20-LCH-1M	1	7789306010

UR20-EM-1315670000-SP	1	1347250000
UR20-BM-SP	5	1350930000
UR20-PK-1315670000-SP	5	1483950000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315670000

4AI-UI-DIF-16-DIAG

- 4 differential analog inputs
- Advanced diagnosis functions
- Parameterizable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 4-wire
- Accuracy 0.1% FSR

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Input value

Resolution
Accuracy
Sensor supply
Sensor supply
Sensor connection
Input type
Common mode range
Conversion time
Internal resistance I
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
Short-circuit-proof

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue input module, 4 channels, 16 Bits, Differential inputs

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4AI-UI-DIF-16-DIAG****u-remote system bus**

48 Mbit
500 V DC between the current paths

24 V DC $\pm 20\%$ / -15% , via the system bus
8 mA
30 mA

4

Voltage U (0...5 V, ± 5 V, 0...10 V, ± 10 V, 1...5 V, 2...10 V), Current I (0...20 mA, 4...20 mA)

16 Bit
0.1% FSR
Yes
500mA
2-wire, 3-wire, 4-wire
Differential input
-30V...30V

1 ms
18 Ω
Yes
Yes
Yes
Yes

90 g

120 mm / 11.5 mm / 76 mm

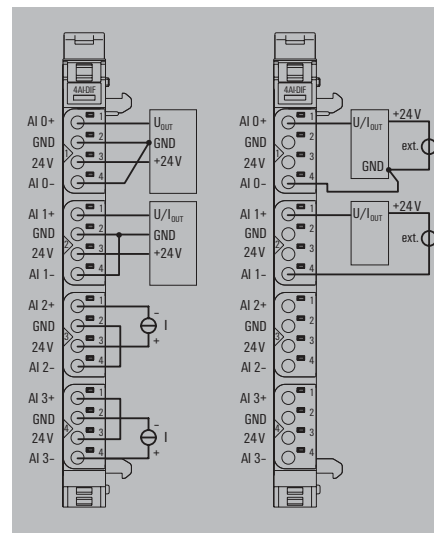
Type	Qty.	Order No.
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UR20-4AI-UI-DIF-16-DIAG	1	1993880000
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Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1993880000-SP	1	2446190000
UR20-BM-SP	5	1350930000
UR20-PK-1993880000-SP	5	2446200000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1993880000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Analogue input modules

4AI-UI-DIF-32-DIAG

- 4 differential analog inputs
- Advanced diagnosis functions
- Parameterizable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 4-wire
- Accuracy 0.1% FSR

UR20-4AI-UI-DIF-32-DIAG



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	64 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I _m (power segment of the field bus coupler), typ.	8 mA
Current consumption I _m (the respective power segment)	30 mA
Analogue inputs	
Number of analogue inputs	4
Input value	Voltage U (0...5 V, ±5 V, 0...10 V, ±10 V, 1...5 V, 2...10 V), Current I (0...20 mA, 4...20 mA)
Resolution	16 Bit
Accuracy	0.1% FSR
Sensor supply	Yes
Sensor supply	500mA
Sensor connection	2-wire, 3-wire, 4-wire
Input type	Differential input
Common mode range	-30V...30V
Conversion time	1 ms
Internal resistance I	16 Ω
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	Yes
Short-circuit-proof	Yes
General data	
Weight	90 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants
Analogue input module, 4 channels, 32 Bits, Differential inputs
Note

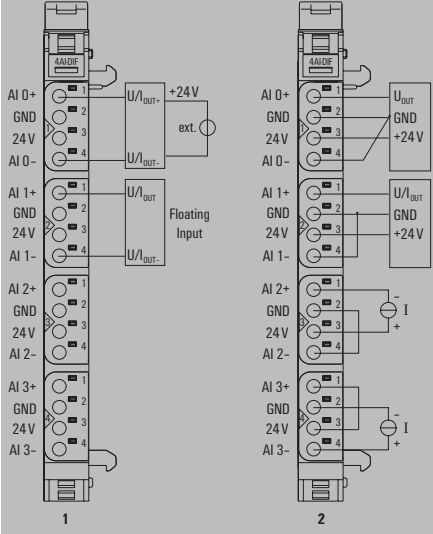
Accessories

Termination kit
Swivel marker
Connection marker for pusher neutral
Connection marker for pusher custom printing
Module marker for custom printing
Module marker for neutral
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
UR20-4AI-UI-DIF-32-DIAG	1	2544660000

Type	Qty.	Order No.
UR20-4AI-UI-DIF-32-DIAG	1	2544660000

Type	Qty.	Order No.
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC NE WS	960	1323710000
PM 2.7/2.6 MC SDR	192	1323700000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
UR20-EM-2544660000-SP	1	2550610000
UR20-BM-SP	5	1350930000
UR20-PK-2544660000-SP	5	2550620000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

Temperature modules and potentiometer input module

Available for TC and RTD; 16-bit resolution;
50/60 Hz suppression

The recording of resistance temperature and thermocoupler sensors is indispensable for many applications. The 4-channel input modules from Weidmüller are designed for all common thermal elements and resistance temperature sensors. With an accuracy of 0.2 % of the measurement range end value and a resolution of 16 bits, cable breaks and instances of the limit value being exceeded or falling below are detected by means of individual channel diagnosis. Additional features such as an automatic 50-Hz to 60-Hz suppression or external as well as internal cold-junction compensation, as are available with the TC module, round off the scope of function.

The potentiometer input module allows direct connection of potentiometers. By integrated reference voltage (+ 10V), a measurement of 300 Ω to 50 k Ω is possible. By a very fast conversion time of up to 500 μ s the module is suited for demanding positioning tasks.

UR20-4AI-RTD-DIAG



UR20-4AI-RTD-HP-DIAG



UR20-8AI-RTD-DIAG-2W



UR20-4AI-TC-DIAG



UR20-4AI-R-HS-16-DIAG



4AI-RTD-DIAG

- 16-bit resolution
- Individual channel diagnosis
- Automatic 50 and 60 Hz suppression
- For 2-, 3- and 4-wire RTDs
- High accuracy
- For virtually all common sensors
- Temperature measurement via resistor

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Type

Resolution
Accuracy
Sensor connection
Temperature coefficient
Temperature range
Conversion time
Internal resistance U
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue input module, 4 channels, RTD

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4AI-RTD-DIAG****u-remote system bus**

48 Mbit
DC 500 V between current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
< 20 mA

4

Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni 200, Ni500, Ni1000, Cu10, 40Ω, 80Ω, 150Ω, 300Ω, 500Ω, 1kΩ, 2kΩ, 4kΩ

16 Bit

0.2% FSR / 0.3% FSR for Ni sensors / 0.6% FSR for Cu10

2-wire, 3-wire, 4-wire

≤ 50 ppm/K

-200...850 °C

adjustable, 36...240 ms

1 MΩ

Yes

Yes

Yes

91 g

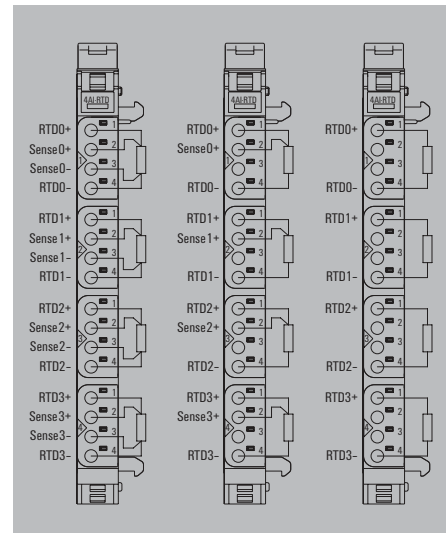
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4AI-RTD-DIAG	1	1315700000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315700000-SP	1	1347290000
UR20-BM-SP	5	1350930000
UR20-PK-1315700000-SP	5	1484040000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315700000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Temperature modules and potentiometer input module

4AI-RTD-HP-DIAG

- 16-bit resolution
- Individual channel diagnosis
- For 2-,3- and 4wire RTDs
- High accuracy
- For virtually all common sensors
- Temperature measurement via resistor

UR20-4AI-RTD-HP-DIAG



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_{M} (power segment of the field bus coupler), typ.	8 mA
Current consumption I_{M} (the respective power segment)	< 20 mA
Analogue inputs	
Number of analogue inputs	4
Type	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni 200, Ni500, Ni1000, Cu10, 40Ω, 80Ω, 150Ω, 300Ω, 500Ω, 1kΩ, 2kΩ, 4kΩ
Resolution	16 Bit
Accuracy	max. 0,6 K for Measurement range Pt100 (-200 ... +250 °C), max. 0,2 % FSR for Pt sensors and resistance measurement (-200 ... +250 °C), max. 0,3 % FSR for Ni sensors, max. 0,6 % FSR for Cu10
Sensor connection	2-wire, 3-wire, 4-wire
Temperature coefficient	≤ 50 ppm/K
Temperature range	-200...850 °C
Conversion time	adjustable, 36...240 ms
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	Yes
General data	
Weight	88 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

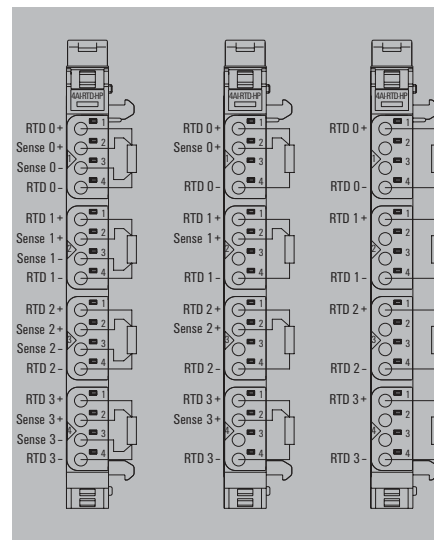
Module variants
Analogue input module, 4 channels, RTD
Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
UR20-4AI-RTD-HP-DIAG	1	2456540000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-2456540000-SP	1	2545620000
UR20-BM-SP	5	1350930000
UR20-PK-2456540000-SP	5	2545610000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-2456540000

8AI-RTD-DIAG-2W

- 16-bit resolution
- Individual channel diagnosis
- For 2-wire RTDs
- High accuracy
- For virtually all common sensors
- Temperature measurement via resistor

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Analogue inputs

Number of analogue inputs
Type

Resolution
Accuracy
Sensor connection
Temperature coefficient
Temperature range
Conversion time
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue input module, 8 channels, RTD

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

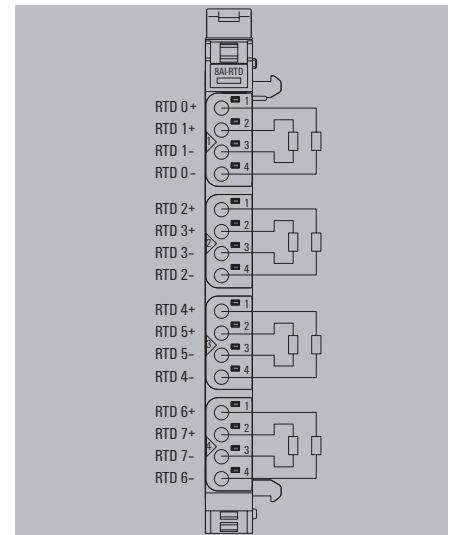
Note**UR20-8AI-RTD-DIAG-2W**

u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
< 20 mA
8
Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni 200, Ni500, Ni1000, Cu10, 40Ω, 80Ω, 150Ω, 300Ω, 500Ω, 1kΩ, 2kΩ, 4kΩ
16 Bit
0.2% FSR / 0.3% FSR for Ni sensors / 0.6% FSR for Cu10
2-wire
≤ 50 ppm/K
-200...850 °C
80 ms
Yes
Yes
Yes
91 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-8AI-RTD-DIAG-2W	1	2555940000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-2555940000-SP	1	2593310000
UR20-BM-SP	5	1350930000
UR20-PK-2555940000-SP	5	2593300000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	
MSIP	

Temperature modules and potentiometer input module

4AI-TC-DIAG

- 4 analogue inputs
- Various TC sensors
- High accuracy of 0.2 % FSR
- 16-bit resolution
- Individual channel diagnosis
- Internal or external cold-junction compensation possible
- Automatic 50 and 60 Hz suppression

UR20-4AI-TC-DIAG



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	< 20 mA
Analogue inputs	
Number of analogue inputs	4
Type	J, K, T, B, N, E, R, S, L, U, C, mV
Resolution	16 Bit
Accuracy	0.2% FSR
Sensor connection	2-wire
cold junction compensation	Internal and external (int. accuracy ≤ 3 K)
Temperature coefficient	≤ 50 ppm/K
Temperature range	-200...2315 °C
Conversion time	adjustable, 36...240 ms
Internal resistance U	1 MΩ
Module diagnosis	Yes
Individual channel diagnosis	Yes
Reverse polarity protection	Yes
General data	
Weight	86 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants	
Analogue input module, 4 channels, thermocouple	
Note	

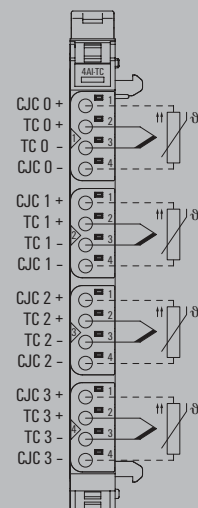
Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

Technical data		
Interface	u-remote system bus	
Transmission speed of system bus, max.	48 Mbit	
Galvanic isolation	DC 500 V between current paths	
Supply		
Voltage supply	24 V DC +20 %/-15 %, via the system bus	
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA	
Current consumption I_M (the respective power segment)	< 20 mA	
Analogue inputs		
Number of analogue inputs	4	
Type	J, K, T, B, N, E, R, S, L, U, C, mV	
Resolution	16 Bit	
Accuracy	0.2% FSR	
Sensor connection	2-wire	
cold junction compensation	Internal and external (int. accuracy ≤ 3 K)	
Temperature coefficient	≤ 50 ppm/K	
Temperature range	-200...2315 °C	
Conversion time	adjustable, 36...240 ms	
Internal resistance U	1 MΩ	
Module diagnosis	Yes	
Individual channel diagnosis	Yes	
Reverse polarity protection	Yes	
General data		
Weight	86 g	
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm	
Note		

Type	Qty.	Order No.
UR20-4AI-TC-DIAG	1	1315710000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
Replacement parts		
UR20-EM-1315710000-SP	1	1435740000
UR20-BM-SP	5	1350930000
UR20-PK-1315710000-SP	5	1484050000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315710000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4AI-R-HS-16-DIAG

- 4 potentiometer inputs
- Measuring range from 300 Ω ... 50 kΩ
- 500 µs conversion time
- 16 Bit resolution
- Accuracy <± 0.25 % FSR
- Individual calibration and scaling

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I _M (power segment of the field bus coupler), typ.	
Current consumption I _M (the respective power segment)	
Analogue inputs	
Number of analogue inputs	
Sensor connection	
Input value	
Measurement range	
Conversion time	
Resolution	
Accuracy	
Temperature coefficient	
Input resistance	
Voltage supply	
Current of supply voltage output	
Wire-break recognition	
Short-circuit-proof	
Module diagnosis	
Individual channel diagnosis	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants
Analogue input module for potentiometer, 4 channels, 16 bits
Note

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

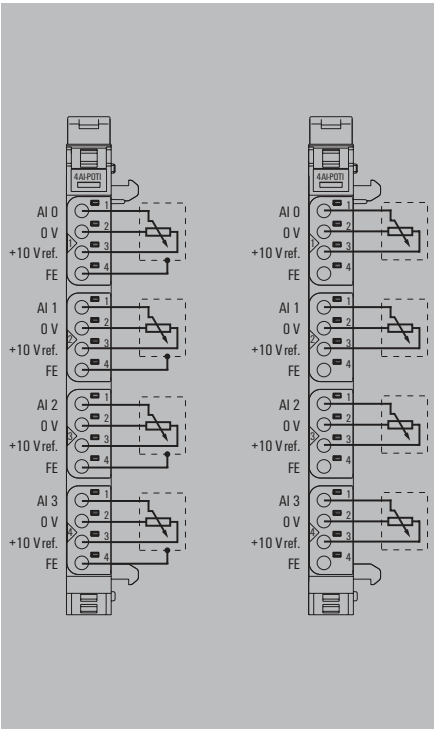
UR20-4AI-R-HS-16-DIAG



u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
26 mA
4
3-wire, 3-wire + FE
Ratiometric potentiometer evaluation with own power supply
300 Ω ... 50 kΩ
typ. 500 µs (typ. 625 µs at 50 Hz / typ. 521 µs at 60 Hz frequency suppression)
16 Bit
< ± 0.25 % FSR at 25 °C
≤ 50 ppm/K
typ. 500 kΩ against the wiper connection
24 V DC +20 %/-15 %, via the system bus
max. 0.05 A per channel, total 0.2 A
Yes
Yes
Yes
Yes
89 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4AI-R-HS-16-DIAG	1	2001670000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-2001670000-SP	1	2068640000
UR20-BM-SP	5	1350930000
UR20-PK-2001670000-SP	5	2068610000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-2001670000

Strain gauge module

2-channel module for u-remote load cell analysis

Measuring bridges in the form of strain gauges are used to measure weight, torque or oscillation. Fast or exact measurements are often required here, for example when it comes to determining computational data.

B

The strain gauge module from u-remote provides an accuracy of up to 0.01% with two 24-bit resolution channels. Calibration and gauging enable industrial applications. A tare function can be triggered per channel, processes are optimised and costs reduced. The Calibration by an independent body can be performed easily via the u-remote web server. User-friendly calibration via the web server has a password protection as well as documentation functionality in order to secure settings.

The u-remote strain gauge module enables the parallel analysis of measurement data from up to four load cells on a single channel.

UR20-2AI-SG-24-DIAG



2AI-SG-24-DIAG

- 2 differential inputs for DMS
- 24-bit resolution
- 4- or 6-wire connection
- Accuracy $\pm 0.01\%$ FSR
- Individual channel diagnosis

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption I_M (the respective power segment)	
Analogue inputs	
Number of analogue inputs	
Input value	
Resolution	
Accuracy	
Supported sensor sensitivity	
Temperature coefficient	
Permissible sensor load	
Conversion time	
Measurement range	
Module diagnosis	
Individual channel diagnosis	
Short-circuit-proof	
Digital inputs	
Input filter	
Input voltage, high	
Input voltage, low	
Individual channel diagnosis	
Short-circuit-proof	
Module diagnosis	
Input type	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
	Strain gauge module, 2 channels
Note	

Accessories

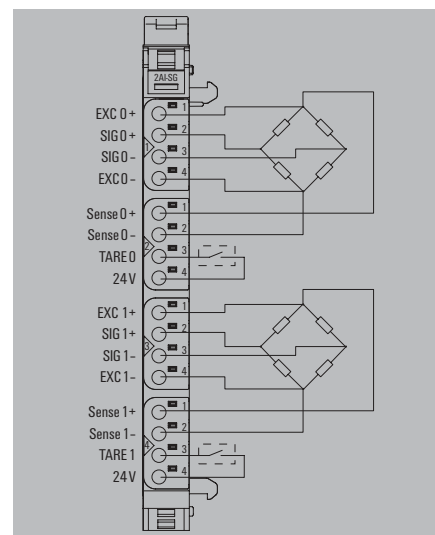
	Coding elements
	Termination kit
	Swivel marker
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

UR20-2AI-SG-24-DIAG

u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC $\pm 20\%$ / -15% , via the system bus	
8 mA	
35 mA	
2	
Differential, to evaluate a strain gauge full-bridge	
24 bit per channel	
Customer calibration: $\pm 0.01\%$ FSR (100 ppm), $\pm 1\%$ FSR (with interference)	
0.5 mV - 30 V, parameterisable	
< 10 ppm/K	
85 ... 5000 Ω	
5 - 800 ms, parameterisable	
± 150 mV	
Yes	
Yes	
Yes	
10 ms	
> 11 V	
< 5 V	
Yes	
Yes	
Yes	
Type 1 in acc. with IEC 61131-2, Type 3 in acc. with IEC 61131-2	
90 g	
11.5 mm / 120 mm / 76 mm	

Type	Qty.	Order No.
UR20-2AI-SG-24-DIAG	1	1990070000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1990070000-SP	5	1562260000
UR20-BM-SP	5	1350930000
UR20-PK-1990070000-SP	5	2068620000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1990070000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Power measurement module

Power measurement via 1- or 3-phase, rated voltage to 300 V_{eff}

The power measurement module is used for recording and processing of currents and voltages on one or three-phase loads up to a rated voltage of 300 V_{eff} AC (phase to neutral conductor). Reactive, apparent harmonic and active power, energy consumption, phase angle, and many other electrical parameters are measured or calculated by the module. The transmitted data via the process data of the different fieldbuses can be selected via parameters.

The Power measurement module can be easily integrated into existing automation solutions with u-remote. Using split-core current transformers it is not even necessary to intervene in the existing installation. Currents from 1 A or up to 5 A can be measured directly, higher currents can be measured with split-core or plugin current transformers from Weidmüller.

UR20-3EM-230V-AC



3EM-230V-AC

- 1- or 3-phase power measurement for 1 A or 5 A (with or without transformer)
- Measurement in the phase conductor
- 16 bit resolution
- Power-/ reactive power measurement
- Energy meter Active / reactive
- Power factor
- Frequency measurement 45 ... 65 Hz
- Analysis of 31 harmonics

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_{IN} (power segment of the field bus coupler), typ.
Current consumption I_{IN} (the respective power segment)

Analogue inputs

Number
Rated voltage
Resolution
Sampling rate of current measurement
Frequency of the supply system
Analysis of harmonic
Power rating
Insulation
Nominal peak voltage
Category for voltage measurements
Measurement method
Measurement accuracy
Connectable converter ratios
Input impedance voltage
Measurement resistance (shunt)

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Power measurement module, 3 channels

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

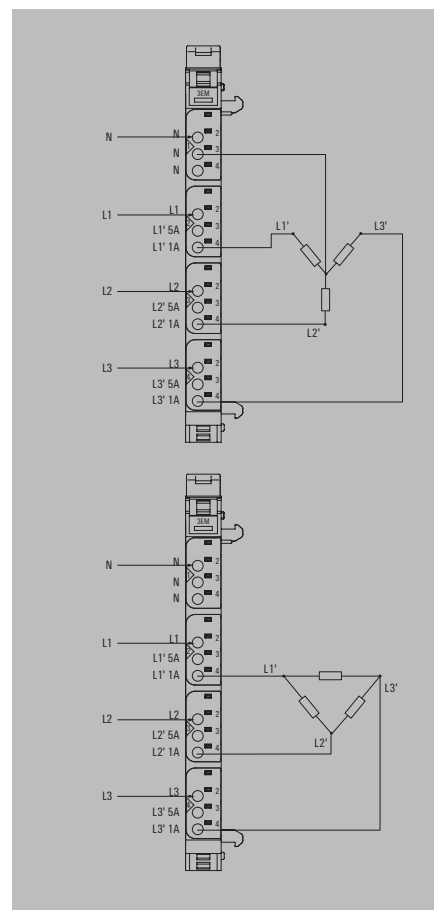
Note**UR20-3EM-230V-AC**

u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
12 mA
3
300 V_{eff} (L-N)
16 bit per channel (internal 24 bit)
3,300 samples/s
45...65 Hz
31 (Blackmann-Harris Window)
0...1 A / 0...5 A AC
1.5 kV_{eff} (input / system)
4
CAT II (IEC 61010 Part 1)
High Resolution Delta Sigma (current measurement in outer conductor)
0.5% in relation to final value (U / I), 1% for the calculated values
1 ... 1000
2.4 MΩ per channel
4 mΩ (at 5 A), 20 mΩ (at 1 A)
90 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-3EM-230V-AC	1	2007420000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-2007420000-SP	1	1562270000
UR20-BM-SP	5	1350930000
UR20-PK-2007420000-SP	5	2068630000



Product standard IEC 61131-2
EMC EN 61000
ATEX EN 60079
UL UL 61010-2-201
MSIP
ABS (American Bureau of Shipping)
BSH (Federal Maritime and Hydrographic Agency of Germany)
BV (Bureau Veritas)
DNV GL (Det Norske Veritas) (Germanischer Lloyd)
LR (Lloyd's Register)
RINA (Registro Italiano Navale)

Analogue output modules

2- or 4-wire connection; 16-bit resolution; 4 outputs

The analogue output module controls up to 4 analogue actuators with $\pm 10\text{ V}$, $\pm 5\text{ V}$, $0\ldots 10\text{ V}$, $0\ldots 5\text{ V}$, $2\ldots 10\text{ V}$, $1\ldots 5\text{ V}$, $0\ldots 20\text{ mA}$ or $4\ldots 20\text{ mA}$ with an accuracy of 0.05 % of the measurement range end value. An actuator with 2- or 4-wire technology can be connected to each plug-in connector. The outputs are defined channel by channel using parameterisation. A separate status LED is assigned to each channel.

The outputs are supplied from the output current path (U_{OUT}).

UR20-4AO-UI-16



UR20-4AO-UI-16-M



UR20-4AO-UI-16-DIAG



UR20-4AO-UI-16-M-DIAG



UR20-4AO-UI-16-HD



UR20-4AO-UI-16-DIAG-HD



4AO-UI-16

- 4 analogue outputs
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05% FSR
- Replacement values can be set per channel
- Reactionless
- Short-circuit-proof

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_{IN} (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Analogue outputs

Number of analogue outputs
Output variable

Response time
Resolution
Accuracy
load impedance voltage

load impedance current
Actuator connection
Temperature coefficient
Max. error between T min. and T max.
Monotonicity
Cross-talk between the channels
Repeat accuracy
Module diagnosis
Substitute values

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue output module, 4 channels, 16 Bit

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4AO-UI-16****u-remote system bus**

48 Mbit
DC 500 V between current paths

24 V DC $\pm 20\%$ / $\pm 15\%$, via the system bus
8 mA
85 mA

4

Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V, ± 5 V), Current (0...20 mA or 4...20 mA)

1 ms / 4 channels

16 Bit

$\pm 0,1\%$ FSR max., 0,05 % FSR typ.

$> 1\text{ k}\Omega$ (at $> 50^\circ\text{C}$ ambient temperature, max. total sensor current = 25 mA)

$< 600\ \Omega$

2-wire (automatic detection), 4-wire

20 ppm voltage / 31 ppm current measurement / $^\circ\text{K}$

220 ppm FSR

Yes

0.001 % FSR

$< 1\text{ mV}$ eff.

Yes

Yes

Yes

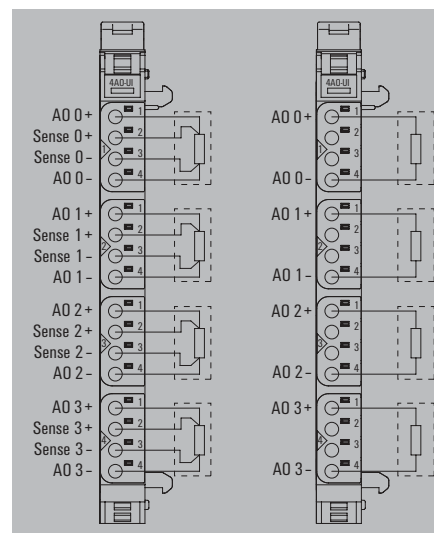
86 g

120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4AO-UI-16	1	1315680000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315680000-SP	1	1347270000
UR20-BM-SP	5	1350930000
UR20-PK-1315680000-SP	5	1484070000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315680000

Analogue output modules

4AO-UI-16-M

- Approved for ship automation
- 4 analogue outputs
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05% FSR
- Replacement values can be set per channel
- Reactionless
- Short-circuit-proof

Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +30 %/-25 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	85 mA
Analogue outputs	
Number of analogue outputs	4
Output variable	Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V, ± 5 V), Current (0...20 mA or 4...20 mA)
Response time	1 ms / 4 channels
Resolution	16 Bit
Accuracy	$\pm 0,1$ % FSR max., 0,05 % FSR typ.
load impedance voltage	> 1 k Ω (at >50 °C ambient temperature, max. total sensor current = 25 mA)
load impedance current	< 600 Ω
Actuator connection	2-wire (automatic detection), 4-wire
Temperature coefficient	20 ppm voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	Yes
Cross-talk between the channels	0.001 % FSR
Repeat accuracy	< 1 mV eff.
Module diagnosis	Yes
Substitute values	Yes
General data	
Weight	94 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants
Analogue output module, 4 channels, 16 Bit
Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

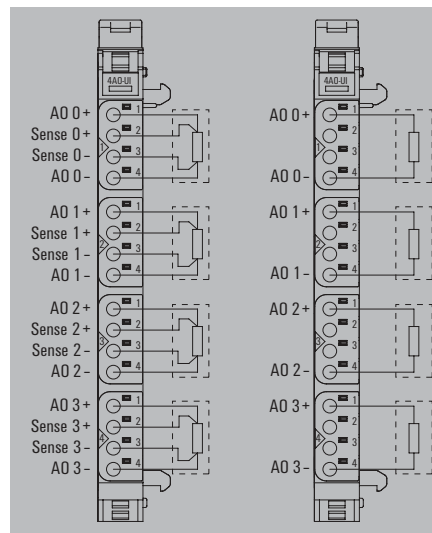
UR20-4AO-UI-16-M



System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +30 %/-25 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	85 mA
Analogue outputs	
Number of analogue outputs	4
Output variable	Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V, ± 5 V), Current (0...20 mA or 4...20 mA)
Response time	1 ms / 4 channels
Resolution	16 Bit
Accuracy	$\pm 0,1$ % FSR max., 0,05 % FSR typ.
load impedance voltage	> 1 k Ω (at >50 °C ambient temperature, max. total sensor current = 25 mA)
load impedance current	< 600 Ω
Actuator connection	2-wire (automatic detection), 4-wire
Temperature coefficient	20 ppm voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	Yes
Cross-talk between the channels	0.001 % FSR
Repeat accuracy	< 1 mV eff.
Module diagnosis	Yes
Substitute values	Yes
General data	
Weight	94 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Type	Qty.	Order No.
UR20-4AO-UI-16-M	1	2453880000
Note		

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
Note		
UR20-EM-2453880000-SP	1	2508790000
UR20-BM-SP	5	1350930000
UR20-PK-2453880000-SP	5	2508770000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	
Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4AO-UI-16-DIAG

- Extended diagnostic function
- 4 analogue outputs
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05% FSR
- Replacement values can be set per channel
- Reactionless
- Short-circuit-proof

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Analogue outputs

Number of analogue outputs
Output variable

Response time
Resolution
Accuracy
load impedance voltage

load impedance current
Actuator connection
Temperature coefficient
Max. error between T min. and T max.
Monotonicity
Cross-talk between the channels
Repeat accuracy
Module diagnosis
Individual channel diagnosis
Substitute values

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Analogue output module, 4 channels, 16 Bits, diagnosis functions

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-4AO-UI-16-DIAG**

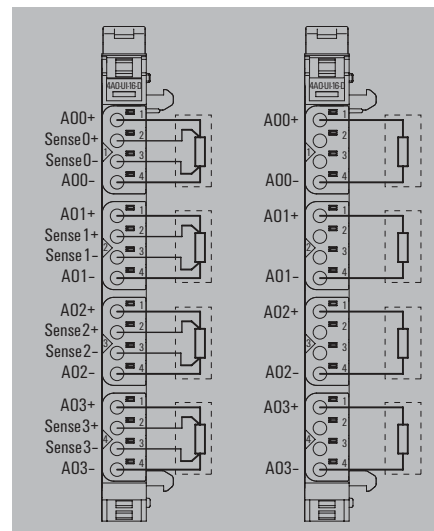
u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
85 mA
4
Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V, ± 5 V), Current (0...20 mA or 4...20 mA)
1 ms / 4 channels
16 Bit
$\pm 0,1$ % FSR max., 0,05 % FSR typ.
> 1 k Ω (at >50 °C ambient temperature, max. total sensor current = 25 mA)
< 600 Ω
2-wire (automatic detection), 4-wire
20 ppm voltage / 31 ppm current measurement / °K
220 ppm FSR
Yes
0.001 % FSR
< 1 mV eff.
Yes
Yes
Yes
86 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-4AO-UI-16-DIAG	1	1315730000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315730000-SP	1	1347330000
UR20-BM-SP	5	1350930000
UR20-PK-1315730000-SP	5	1518880000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315730000

Analogue output modules

4AO-UI-16-M-DIAG

- Approved for ship automation
- Extended diagnostic function
- 4 analogue outputs
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05% FSR
- Replacement values can be set per channel

UR20-4AO-UI-16-M-DIAG



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +30 %/-25 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	85 mA
Analogue outputs	
Number of analogue outputs	4
Output variable	Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V, ± 5 V), Current (0...20 mA or 4...20 mA)
Response time	1 ms / 4 channels
Resolution	16 Bit
Accuracy	$\pm 0,1$ % FSR max., 0,05 % FSR typ.
load impedance voltage	> 1 k Ω (at >50 °C ambient temperature, max. total sensor current = 25 mA)
load impedance current	< 600 Ω
Actuator connection	2-wire (automatic detection), 4-wire
Temperature coefficient	20 ppm voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	Yes
Cross-talk between the channels	0.001 % FSR
Repeat accuracy	< 1 mV eff.
Module diagnosis	Yes
Individual channel diagnosis	Yes
Substitute values	Yes
General data	
Weight	94 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

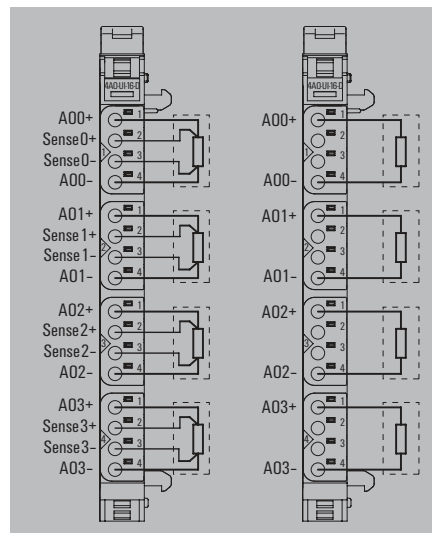
Module variants
Analogue output module, 4 channels, 16 Bits, diagnosis functions
Note

Accessories

	Coding elements
	Termination kit
	Swivel marker
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-4AO-UI-16-M-DIAG	1	2453870000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-2453870000-SP	1	2508800000
UR20-BM-SP	5	1350930000
UR20-PK-2453870000-SP	5	2508780000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

4AO-UI-16-HD

- 4 analogue outputs
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05 % FSR
- Replacement values can be set per channel
- Non reactive

Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	85 mA
Analogue outputs	
Number of analogue outputs	4
Output variable	Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V, ± 5 V), Current (0...20 mA or 4...20 mA)
Response time	1 ms / 4 channels
Resolution	16 Bit
Accuracy	$\pm 0,1$ % FSR max., 0,05 % FSR typ.
load impedance voltage	> 1 k Ω (at >50 °C ambient temperature, max. total sensor current = 25 mA)
load impedance current	< 600 Ω
Actuator connection	2-wire (current and voltage), 3- and 4-wire (voltage), 2-wire (automatic detection)
Temperature coefficient	20 ppm voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	Yes
Cross-talk between the channels	0.000 % FSR
Repeat accuracy	< 1 mV eff.
Module diagnosis	Yes
Individual channel diagnosis	No
Substitute values	Yes
General data	
Weight	72 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

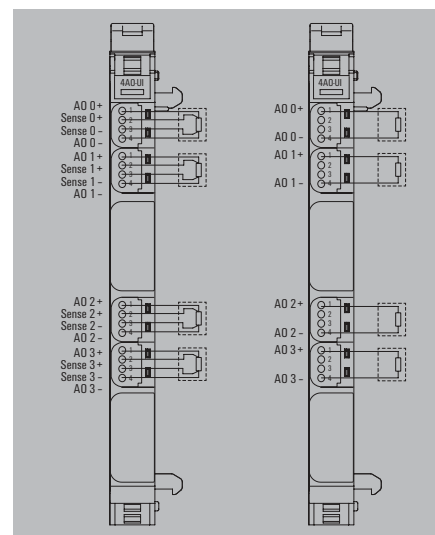
Module variants
Analogue output module, 4 channels, 16 Bits, HD-plug
Note

Accessories

Coding elements
Termination kit
Swivel marker
*3) HD plug
*4) Stripping tool
*5) Pressing tool
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

UR20-4AO-UI-16-HD

Note: Please order connector separately



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1510690000

Type	Qty.	Order No.
UR20-4AO-UI-16-HD	1	1510690000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PG0.35	8	1469340000
MULTI-STRIPAX 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1510690000-SP	1	1515470000
UR20-BM-SP	5	1350930000
UR20-PK-1510690000-SP	5	1531830000

Note: please order plug (1469340000) separately.

Analogue output modules

4AO-UI-16-DIAG-HD

- 4 analogue outputs
- Advanced diagnosis functions
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05 % FSR
- Replacement values can be set per channel
- Non reactive

UR20-4AO-UI-16-DIAG-HD



Note: Please order connector separately

Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption from I_{OUT} (the respective power segment)	85 mA
Analogue outputs	
Number of analogue outputs	4
Output variable	Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ± 10 V, ± 5 V), Current (0...20 mA or 4...20 mA)
Response time	1 ms / 4 channels
Resolution	16 Bit
Accuracy	$\pm 0,1$ % FSR max., 0,05 % FSR typ.
load impedance voltage	> 1 k Ω (at >50 °C ambient temperature, max. total sensor current = 25 mA)
load impedance current	< 600 Ω
Actuator connection	2-wire (current and voltage), 3- and 4-wire (voltage), 2-wire (automatic detection)
Temperature coefficient	20 ppm voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	Yes
Cross-talk between the channels	0.000 % FSR
Repeat accuracy	< 1 mV eff.
Module diagnosis	Yes
Individual channel diagnosis	Yes
Substitute values	Yes
General data	
Weight	74 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

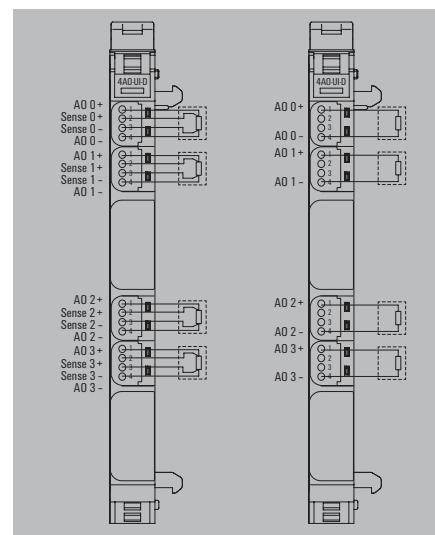
Module variants
Analogue output module, 4 channels, diagnosis functions, HD-plug
Note

Accessories

Coding elements	
Termination kit	
Swivel marker	
*3) HD plug	
*4) Stripping tool	
*5) Pressing tool	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
UR20-4AO-UI-16-DIAG-HD	1	1506930000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PG0.35	8	1469340000
MULTI-STRIPAX 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1506930000-SP	1	1515480000
UR20-BM-SP	5	1350930000
UR20-PK-1506930000-SP	5	1531810000
Note: please order plug (1469340000) separately.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1506930000

Digital counter- and communication- modules

100/ 500 kHz; 32-Bit Counter data width; Single channel diagnosis

In automated systems, it is impossible to imagine industry without the collection of incremental- and absolut encoder values. Developed specifically for these applications Weidmüller now offers several counter modules that can take values with an input frequency of up to 500 kHz. By the synchronous-serial Interface module (SSI) high-precision positioning can be realized with absolute encoders. By parameterization the module can work in master- or listening mode to meet all operational situations. For the frequency measurement up to 100 kHz a module with pulse input is available, the UR20-1CNT-500 module has an input that can detect frequencies up to 500 kHz. The UR20-2CNT-100 module has two independent counter inputs and is supplemented by the module UR20-1CNT-100-1DO with only one counter, but additional options. A Latch-, Gate- and Reset input allows external control of the counter. In addition, a digital output can trigger an immediate event, when there are compared values set.

The module UR20-1COM-232-485-422 offers expanded communication possibilities, devices with RS232, RS485 or RS422 interface can be operated efficiently on u-remote. A solution for the connection from the cabinet to the field represents the module UR20-1COM-SAI-PRO. At this gateway up to 15 decentralized IP67 SAI-PRO sub-bus modules can be integrated per u-remote module. Thanks to simplified installation and commissioning, an extended power supply, automatic parameter settings as well as additional diagnostic functions corresponds the new 4-port IO Link Master to the current requirements.

The module electronics supply the connected sensors from the input current path (U_{IN}).

Digital counter modules

UR20-1CNT-100-1DO



UR20-2CNT-100



UR20-1CNT-500



UR20-2FCNT-100



Communication modules

UR20-1SSI



UR20-1COM-232-485-422



UR20-1COM-SAI-PRO



UR20-4COM-IO-LINK



1CNT-100-1D0

- Removable terminals Latch-, Gate- and Reset input
- Counter data width 32-Bit
- Maximum input frequency 100 kHz
- Operation mode impulse, direction, 1-, 2- or 4-times
- Sensor feed
- Input filter adjustable up to 1 ms
- One digital output

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption I_M (the respective power segment)	
Digital inputs	
Number	
Input type	
Input filter	
Input voltage, low	
Input voltage, high	
Sensor supply	
Sensor connection	
Reverse polarity protection	
Module diagnosis	
Individual channel diagnosis	
Max. input current per channel	
Counter width	
Max. input frequency	
max. count rate	
Latch, gate, reset input	
Mode of operation	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
Digital counter module, 1 channel, 100 kHz	
Note	

Accessories

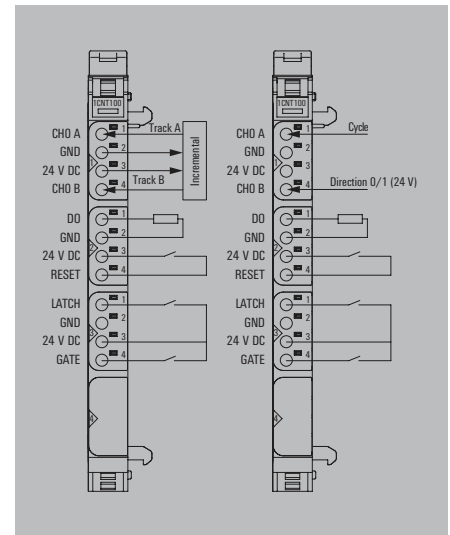
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

UR20-1CNT-100-1D0

u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
35 mA (plus output current)	
1	
for Type 1 and Type 3 sensors as per IEC 61131-2	
configurable	
< 5 V	
> 11 V	
Yes	
2-wire, 3-wire	
Yes	
Yes	
Yes	
3.5	
32	
100 kHz	
400 kHz	
Yes	
Pulse, Direction, 1-, 2-, 4-times	
85 g	
120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-1CNT-100-1D0	1	1315570000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315570000-SP	1	1347140000
UR20-BM-SP	5	1350930000
UR20-PK-1315570000-SP	5	1346520000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315570000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital counter- and communication- modules

2CNT-100

- Counter data width 32-Bit
- Maximum input frequency 100 kHz
- Operation mode impulse, direction, 1-, 2- or 4-times
- Sensor feed
- Input filter adjustable up to 1 ms

UR20-2CNT-100



Technical data

System data

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Digital inputs

Number
Input type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
Max. input current per channel
Counter width
Max. input frequency
max. count rate
Mode of operation

General data

Weight
Dimensions H x W x D

Note

Ordering data

Module variants

Digital counter module, 2 channel, 100 kHz

Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note

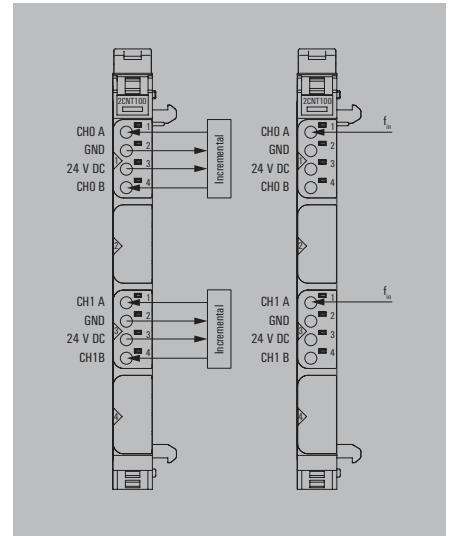
u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
35 mA (plus output current)
2
for Type 1 and Type 3 sensors as per IEC 61131-2
configurable
< 5 V
> 11 V
Yes
2-wire, 3-wire
Yes
Yes
Yes
3.5
32
100 kHz
400 kHz
Pulse, Direction, 1-, 2-, 4-times
85 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-2CNT-100	1	1315590000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315590000-SP	1	1347150000
UR20-BM-SP	5	1350930000
UR20-PK-1315590000-SP	5	1346540000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315590000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

1CNT-500

- Counter data width 32-Bit
- Maximum input frequency 500 kHz
- Operation mode impulse, direction, 1-, 2- or 4-times
- Sensor feed
- Input filter adjustable up to 1 ms
- One digital output

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

Digital inputs

Number
Input filter
Sensor supply
Short-circuit-proof
Module diagnosis
Individual channel diagnosis
Counter width
Max. input frequency
Mode of operation

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Digital counter module, 1 channel, 500 kHz

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-1CNT-500**

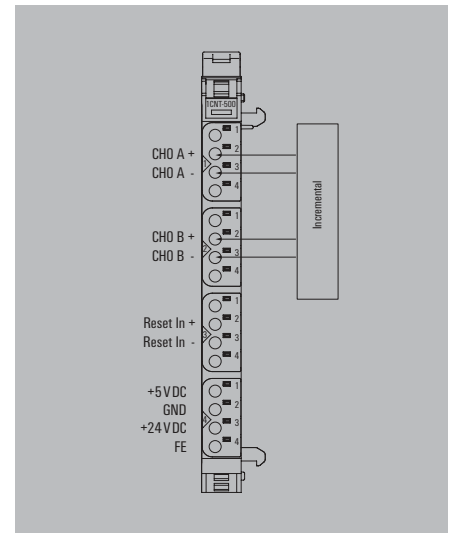
u-remote system bus
48 Mbit
500 V DC between the current paths
24 V DC +20 %/-15 %, via the system bus
8 mA
< 20 mA
1
configurable
Yes
Yes
Yes
No
32 Bit
500 kHz
Pulse, Direction, 1-, 2-, 4-times
88 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-1CNT-500	1	1315580000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-1315580000-SP	1	1347170000
UR20-BM-SP	5	1350930000
UR20-PK-1315580000-SP	5	1346530000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315580000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital counter- and communication- modules

2FCNT-100

- Counter data width 32-Bit
- Maximum input frequency 100 kHz
- Operation mode impulse
- Sensor feed
- Input filter adjustable up to 1 ms

UR20-2FCNT-100



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I_M (power segment of the field bus coupler), typ.	8 mA
Current consumption I_M (the respective power segment)	35 mA (plus output current)
Digital inputs	
Number	2
Input filter	configurable
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	Yes
Sensor connection	2-wire, 3-wire
Reverse polarity protection	Yes
Module diagnosis	Yes
Individual channel diagnosis	No
Max. input current per channel	3.5 mA
Counter width	32 Bit
Max. input frequency	100 kHz
Mode of operation	Pulse
General data	
Weight	65 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants	
Digital frequency counter module, 2 channel, 100 kHz	
Note	

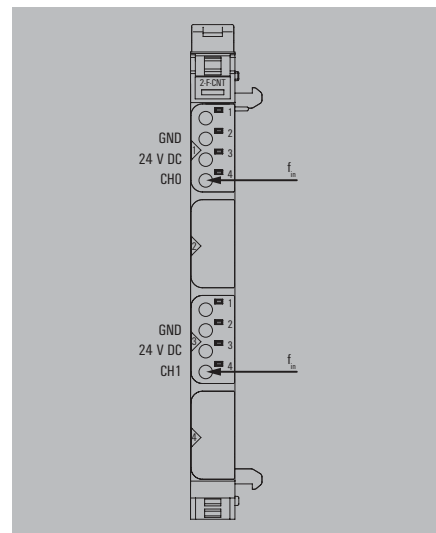
Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

Type		
u-remote system bus		
48 Mbit		
500 V DC between the current paths		
Supply		
24 V DC +20 %/-15 %, via the system bus		
8 mA		
35 mA (plus output current)		
Digital inputs		
2		
configurable		
< 5 V		
> 11 V		
Yes		
2-wire, 3-wire		
Yes		
Yes		
No		
3.5 mA		
32 Bit		
100 kHz		
Pulse		
General data		
65 g		
120 mm / 11.5 mm / 76 mm		

Type	Qty.	Order No.
UR20-2FCNT-100	1	1508080000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
Replacement parts		
UR20-EM-1508080000-SP	1	1515440000
UR20-BM-SP	5	1350930000
UR20-PK-1508080000-SP	5	1518840000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1508080000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

1SSI

- Parameterised transfer rate
- Listening- or Master-Mode
- Data width 8 ... 32 bits
- Adjustable delay time

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I _M (power segment of the field bus coupler), typ.	
Current consumption from I _{OUT} (the respective power segment)	
Serial inputs	
Number	
Data format	
SSI mode	
Sensor supply	
Reverse polarity protection	
Module diagnosis	
Individual channel diagnosis	
Cable length	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
	SSI Module 1 channel, 8 - 32 Bit
Note	

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

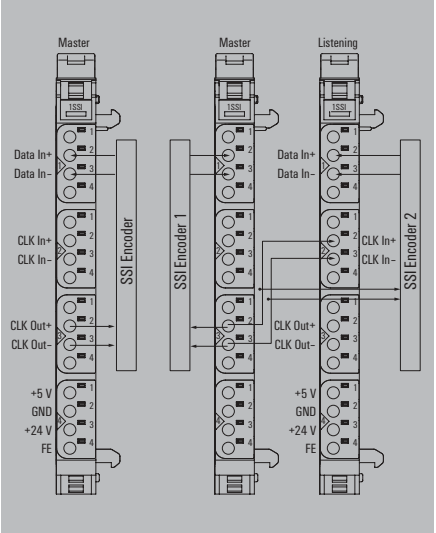
UR20-1SSI



u-remote system bus	
48 Mbit	
500 V DC between the current paths	
Supply	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
25 mA + sensor feed	
Serial inputs	
1	
Binary, Gray-Code	
Listening, Master	
Yes	
Yes	
Yes	
No	
max. 320 m at 125 kHz	
General data	
87 g	
120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-1SSI	1	1508090000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
Replacement parts		
UR20-EM-1508090000-SP	1	1515490000
UR20-BM-SP	5	1350930000
UR20-PK-1508090000-SP	5	1559870000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1508090000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Digital counter- and communication- modules

1COM-232-485-422

- Interface for RS232, RS485 and RS422 peripherals
- Adjustable transfer rate
- Galvanic isolation of the signals in the module
- Separate power supply for external peripheral to the module

UR20-1COM-232-485-422



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Galvanic isolation	500 V DC between the current paths
Supply	
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Current consumption I _m (power segment of the field bus coupler), typ.	8 mA
Current consumption I _m (the respective power segment)	50 mA + load
RS interface	
Number	1
Connection type	1x RS232 / 1x RS485/422
Transmission rate	configurable, 300 - 115200 Bit/s
Voltage supply	24 V DC +20 %/-15 %, via the system bus
Output current, supply voltage	0.5 A
Standards RS232	DIN 66020, DIN 66259, EIA-RS 232C, CCITT V.24/V.28
Standards RS485/422	DIN 66259 Part 1 und 3, EIA-RS 422/485, CCITT V.11
Short-circuit-proof	Yes
Module diagnosis	Yes
Individual channel diagnosis	Yes
General data	
Weight	87 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

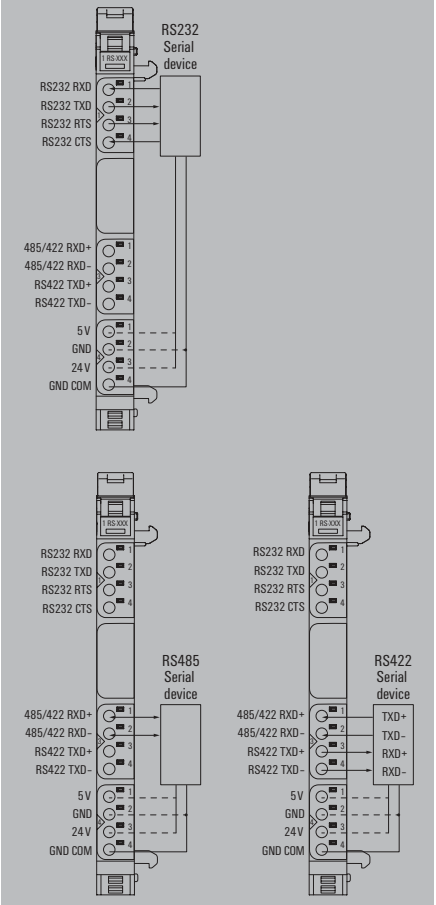
Module variants	
RS232/RS485/RS422 communication module	
Note	

Accessories

Coding elements	KOSM BHZ5.00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE
Thermotransfer version (material: polyester)	THM UR20 WS
Paper version for Laserprinter	ESO UR20 DIN A4 WS
Replacement parts	
Electronic module	UR20-EM-1315750000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315750000-SP
Note	

Type	Qty.	Order No.
UR20-1COM-232-485-422	1	1315750000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315750000-SP	1	1347350000
UR20-BM-SP	5	1350930000
UR20-PK-1315750000-SP	5	2425150000



Product standard	
IEC 61131-2	
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315750000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

1COM-SAI-PRO

- 15 SAI-PRO modules connectable
- Max. 50 m Subbus wire length
- Continuous diagnostics IP20-IP67
- Representation of SAI-PRO modules in web server

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption I_M (the respective power segment)

IP67 interface

Number
Transmission rate
Voltage supply
Output current, supply voltage
Short-circuit-proof
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

IP20-IP67 communication module

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-1COM-SAI-PRO**

u-remote system bus
48 Mbit
500 V DC between the current paths

24 V DC +20 %/-15 %, via the system bus
8 mA
20 mA + SAI supply current

1
max. 500 kBit/s (automatic detection), configurable
24 V DC +20 %/-15 %, via the system bus
2.5 A
Yes
Yes
Yes

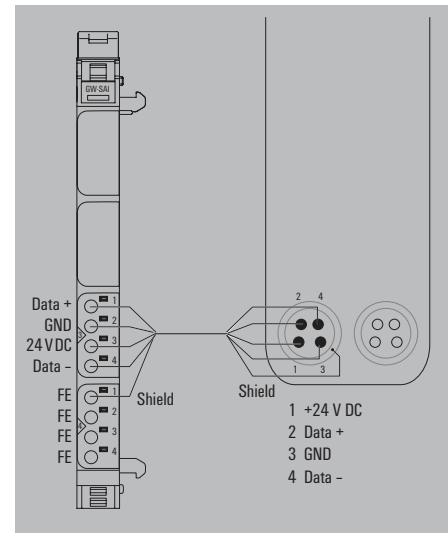
81 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-1COM-SAI-PRO	1	2007430000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-200743000-SP	1	2425350000
UR20-BM-SP	5	1350930000
UR20-PK-2007430000-SP	5	2425160000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-2007430000

Digital counter- and communication- modules

4COM-IO-LINK

- Connection for 4 IO-Link devices
- IO-Link standard according to IEC 61131-9
- Protocol support IO-Link v.1.0 and v.1.1
- Max. 20 m wire length
- Internal data width 4-32 bytes, configurable

UR20-4COM-IO-LINK



Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_M (power segment of the field bus coupler), typ.	
Current consumption I_M (the respective power segment)	
IO-Link interface	
Number	
Connection type	
Output current	
IO link standard	
Short-circuit-proof	
Module diagnosis	
Individual channel diagnosis	
Class	
Digital inputs	
Number	
Type	
Input voltage, low	
Input voltage, high	
General data	
Weight	
Dimensions H x W x D	
Note	

u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
25 mA + sensor feed	
4	
IO-Link	
0.1 A C/Q (DO MODE), 0.5 A L+	
IEC 61131-9	
Yes	
Yes	
Yes	
A	
4	
Types 1 and 3, EN 61131-2	
< 5 V	
> 11 V	
88 g	
120 / 11.5 / 76 mm	

Ordering data

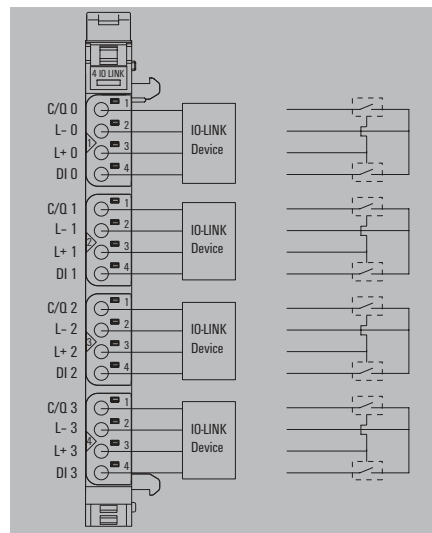
Module variants	
Digital communication module, 4 channels	
Note	

Type	Qty.	Order No.
UR20-4COM-IO-LINK	1	1315740000

Accessories

Replacement parts	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315740000-SP	1	1347340000
UR20-BM-SP	5	1350930000
UR20-PK-1315740000-SP	5	2508760000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

Safe I/O modules and safe power-feed modules

PROFIsafe/FSOE; PL_e, Kat. 4/SIL 3; OSSD-output; wire breakage and short-circuit detection

Safety technology is of central importance in the automation industry and machine construction. When attempting to reduce risks and avoid putting people and the environment in danger, you need solutions which satisfy stringent requirements and statutory specifications.

Weidmüller PROFIsafe and Fail-Safe-over-EtherCAT modules (IEC 61784-3 respectively IEC 61784-3-3) are providing variable parameterization possibilities and because of this a very high flexibility and adaptability to your application. Due to the standards a use in existing systems is straightforward. The safe I/O-modules with PROFIsafe or FSOE are available with digital in- and outputs.

The safe power-feed modules of the u-remote system have key features such as emergency stop circuits and wire breakage/ short-circuit detection. They satisfy all SIL 3 requirements according to IEC 62061 and EN ISO 13849-1, Category 4, PL_e and support the safe operation of your system.

By safely shutting down the downstream output modules, the safety modules attain maximum safety with optimum control. All input sensors are independently supplied via separate voltage paths and report the current machine status to the control unit. The restart is either performed in manual mode or using the autostart function.

Safe I/O- and safe power-feed modules from Weidmüller also cut maintenance and service times and improve your response times in an emergency – thanks to a concept of maximum transparency, e.g. using OSSD output.

The module electronics supply the connected actuators from the output current path (U_{OUT}).

UR20-4DI-4DO-PN-FSPS-V2



UR20-8DI-PN-FSPS-V2



UR20-4DI-4DO-PN-FSOE-V2



UR20-8DI-PN-FSOE-V2



UR20-PF-0-1DI-SIL



UR20-PF-0-2DI-DELAY-SIL



UR20-PF-0-2DI-SIL



4DI-4DO-PN-FSOE-V2

- FailSafe over EtherCAT
- 4 digital inputs, two of them are parametrisable P- or N-switching
- 4 digital outputs, two of them are parametrisable P- or N-switching
- Constant current with thermal switch-off

Technical data

System data	
Interface	
Transmission speed of system bus, max.	
Galvanic isolation	
Supply	
Voltage supply	
Current consumption I_{IN} (power segment of the field bus coupler), typ.	
Current consumption from I_{OUT} (the respective power segment)	
Safety related data	
Achievable safety level, inputs / outputs	
Level of diagnostic coverage DC_{AVE} (IEC 62061)	
Level of diagnostic coverage (DIN EN ISO 13849)	
MTTFd (mean time to dangerous failure), inputs	
MTTFd (mean time to dangerous failure), outputs	
PFH (probability of failure per hour in 1/h), inputs	
Proportion of safety-related outages (SFF)	
HFT (hardware fault tolerance), inputs	
HFT (hardware fault tolerance), outputs	
Inputs	
Number	
Input filter	
Input voltage, low / high	
Reverse polarity protection	
Outputs	
Number	
Output current per channel, max. / Output current per module, max.	
Actuator connection	
Short-circuit-proof	
Response time of the protective circuit (current limiting)	
General data	
Weight	
Dimensions H x W x D	
Note	

Ordering data

Module variants	
Safety module FSOE, 4 digital inputs/outputs	
Note	

Accessories

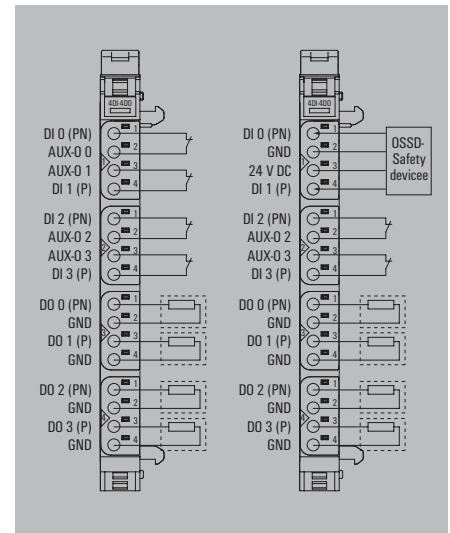
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (material: polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronic module	
Basic module	
Plug-in connector unit	
Note	

UR20-4DI-4DO-PN-FSOE-V2

u-remote system bus	
48 Mbit	
500 V DC between the current paths	
24 V DC +20 %/-15 %, via the system bus	
8 mA	
30 mA	
SIL 3 (IEC 61508), SILCL 3 (IEC 62061), Ple, category 4 (DIN EN ISO 13849-1) / architecture 1oo2 (2 channels)	
Input: 0.921, output: 0.969	
Input, single-channel wiring: 90%; dual-channel wiring: 99%	
> 100 years (840 years)	
> 100 years (279 years)	
Single-channel circuit 1oo1: 10-8, Dual-channel circuit 1oo2: 2,17*10-10	
98 %	
Single-channel circuit 1oo1: 0	
1	
4	
configurable	
< 5 V / > 11 V	
Yes	
4	
0.5 A / 2 A	
2-wire	
Yes	
< 100µs	
90 g	
120 mm / 11.5 mm / 76 mm	

Type	Qty.	Order No.
UR20-4DI-4DO-PN-FSOE-V2	1	2464580000
For this and additional technical data, please refer to the manual available at www.weidmueller.de .		

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-2464580000-SP	5	2466020000
UR20-BM-SP	5	1350930000
UR20-PK-2464580000-SP	1	2465990000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

Safe I/O modules and safe power-feed modules

8DI-PN-FSOE-V2

- FailSafe over EtherCAT
- 8 digital inputs, four of them are parametrisable P- or N-switching
- 2-wire, 3-wire, 4-wire connection

UR20-8DI-PN-FSOE-V2



Technical data

System data
Interface
Transmission speed of system bus, max.
Galvanic isolation
Safety related data
Achievable safety level, inputs / Achievable safety level, inputs
MTTFd (mean time to dangerous failure), inputs
PFH (probability of failure per hour in 1/h), inputs
Proportion of safety-related outages (SFF)
Supply
Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)
Inputs
Number
Input type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis
General data
Weight
Dimensions H x W x D
Note

u-remote system bus
48 Mbit
500 V DC between the current paths
SILCL 2 (IEC 62061), SILCL 3 (IEC 62061) / PLd, category 2 (DIN EN ISO 13849-1) / architecture 1oo1 (1 channel), Plc, category 4 (DIN EN ISO 13849-1) / architecture 1oo2 (2 channels)
> 100 years (840 years)
Single-channel circuit 1oo1: 10-8, Dual-channel circuit 1oo2: 2,17*10-10
98 %
24 V DC +20 %/-15 %, via the system bus
8 mA
30 mA
8
Type 1 in acc. with IEC 61131-2, Type 3 in acc. with IEC 61131-2
configurable
< 5 V
> 11 V
Yes
2-wire, 3-wire, 4-wire
Yes
Yes
Yes
90 g
120 mm / 11.5 mm / 76 mm

Ordering data

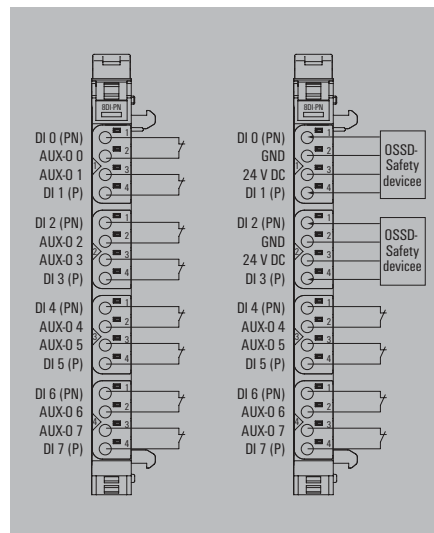
Module variants
Safety module FSOE, 8 digital inputs
Note

Type	Qty.	Order No.
UR20-8DI-PN-FSOE-V2	1	2464600000
For this and additional technical data, please refer to the manual available at www.weidmueller.de .		

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-2464600000-SP	5	2465960000
UR20-BM-SP	5	1350930000
UR20-PK-2464600000-SP	1	2465940000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

4DI-4DO-PN-FSPS-V2

- PROFI-safe
- 4 digital inputs, two of them are parametrisable P- or N-switching
- 4 digital outputs, two of them are parametrisable P- or N-switching
- Constant current with thermal switch-off

Technical data**System data**

Interface
Transmission speed of system bus, max.
Galvanic isolation

Safety related data

Achievable safety level, inputs / outputs

Level of diagnostic coverage DC_{AVE} (IEC 62061)
Level of diagnostic coverage (DIN EN ISO 13849)

MTTFd (mean time to dangerous failure), inputs
MTTFd (mean time to dangerous failure), outputs
PFH (probability of failure per hour in 1/h), inputs

Proportion of safety-related outages (SFF)
HFT (hardware fault tolerance), inputs
HFT (hardware fault tolerance), outputs

Supply

Voltage supply
Current consumption I_{IN} (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Inputs

Number
Input filter
Input voltage, low / high
Reverse polarity protection

Outputs

Number
Output current per channel, max. / Output current per module, max.
Actuator connection
Short-circuit-proof
Response time of the protective circuit (current limiting)

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Safety module PROFI-safe, 4 digital inputs/outputs

Note**Accessories**

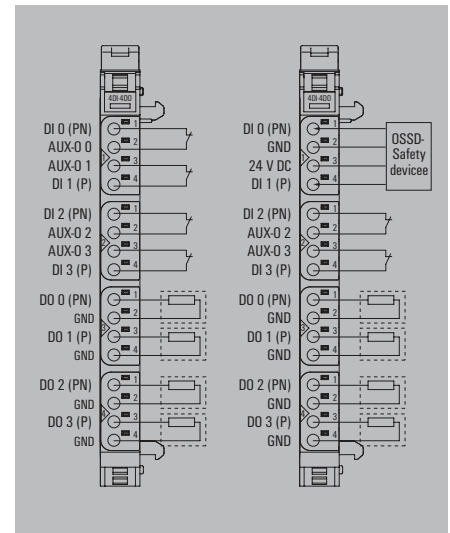
	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter

Replacement parts

	Electronic module
	Basic module
	Plug-in connector unit

Note**UR20-4DI-4DO-PN-FSPS-V2**

u-remote system bus
48 Mbit
500 V DC between the current paths
SIL 3 (IEC 61508), SILCL 3 (IEC 62061), Ple, category 4 (DIN EN ISO 13849-1) / architecture 1oo2 (2 channels)
Input: 0.921, output: 0.969
Input, single-channel wiring: 90%; dual-channel wiring: 99%
> 100 years (840 years)
> 100 years (279 years)
Single-channel circuit 1oo1: 10-8, Dual-channel circuit 1oo2: 2,17*10 ⁻¹⁰
98 %
Single-channel circuit 1oo1: 0
1
24 V DC +20 %/-15 %, via the system bus
8 mA
30 mA
4
configurable
< 5 V / > 11 V
Yes
4
0.5 A / 2 A
2-wire
Yes
< 100µs
90 g
120 mm / 11.5 mm / 76 mm



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

Type	Qty.	Order No.
UR20-4DI-4DO-PN-FSPS-V2	1	2464570000

For this and additional technical data, please refer to the manual available at www.weidmueller.de.

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-2464570000-SP	1	2466030000
UR20-BM-SP	5	1350930000
UR20-PK-2464570000-SP	5	2466000000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.

Safe I/O modules and safe power-feed modules

8DI-PN-FSPS-V2

- PROFIsafe
- 8 digital inputs, four of them are parametrisable P- or N-switching
- 2-wire, 3-wire, 4-wire connection

UR20-8DI-PN-FSPS-V2



Technical data

System data

Interface
Transmission speed of system bus, max.
Galvanic isolation

Safety related data

Achievable safety level, inputs / Achievable safety level, inputs

MTTFd (mean time to dangerous failure), inputs
PFH (probability of failure per hour in 1/h), inputs

Proportion of safety-related outages (SFF)

Supply

Voltage supply
Current consumption I_M (power segment of the field bus coupler), typ.
Current consumption from I_{OUT} (the respective power segment)

Inputs

Number
Input type
Input filter
Input voltage, low
Input voltage, high
Sensor supply
Sensor connection
Reverse polarity protection
Module diagnosis
Individual channel diagnosis

General data

Weight
Dimensions H x W x D

Note

Ordering data

Module variants

Safety module PROFIsafe, 8 digital inputs

Note

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note

u-remote system bus

48 Mbit

500 V DC between the current paths

SILCL 2 (IEC 62061), SILCL 3 (IEC 62061) / PLd, category 2 (DIN EN ISO 13849-1) / architecture 1oo1 (1 channel), Plc, category 4 (DIN EN ISO 13849-1) / architecture 1oo2 (2 channels)

> 100 years (840 years)

Single-channel circuit 1oo1: 10-8, Dual-channel circuit 1oo2: 2,17*10-10

98 %

24 V DC +20 %/-15 %, via the system bus

8 mA

30 mA

8

Type 1 in acc. with IEC 61131-2, Type 3 in acc. with IEC 61131-2

configurable

< 5 V

> 11 V

Yes

2-wire, 3-wire, 4-wire

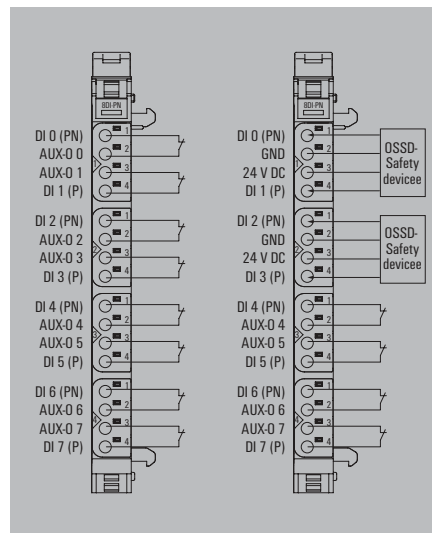
Yes

Yes

Yes

89 g

120 mm / 11.5 mm / 76 mm



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	

Type	Qty.	Order No.
UR20-8DI-PN-FSPS-V2	1	2464590000

For this and additional technical data, please refer to the manual available at www.weidmueller.de.

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000

UR20-EM-2464590000-SP	1	2466010000
UR20-BM-SP	5	1350930000
UR20-PK-2464590000-SP	5	2465950000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.

PF-O-1DI-SIL

- SIL 3 safety standard in accordance with IEC 62061 and DIN EN ISO 13849-1, category 4, PL e
- Connection for an emergency stop circuit
- OSSD output reports status to control unit
- Pulsed input circuit for wire breakage and short-circuit detection
- Restart: manual or using autostart

Technical data**System data**

Interface
Transmission speed of system bus, max.

Safety related data

Achievable safety level, inputs
Proportion of safety-related outages (SFF)
HFT (hardware fault tolerance), inputs

Supply

Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{OUT} (output current path), max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.

Digital inputs

Wire break detection
Short-circuit detection

General data

Weight
Dimensions H x W x D

Note**Ordering data****Module variants**

Safety module, 1 digital input

Note**Accessories**

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter

Replacement parts

Electronic module
Basic module
Plug-in connector unit

Note**UR20-PF-O-1DI-SIL**

u-remote system bus

48 Mbit

SIL 3 (IEC 61508)

98 %

1

24 V DC +20 %/-15 %

24 V DC +20 %/-15 %

8050 mA

8 mA

Yes

Yes

109 g

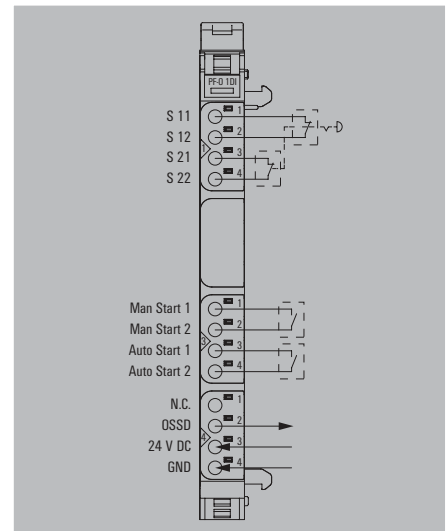
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-PF-O-1DI-SIL	1	1335030000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESD UR20 DIN A4 WS	10	1429430000

UR20-EM-1335030000-SP	1	1347520000
UR20-BM-PF-O-SIL-SP	5	1350970000
UR20-PK-1335030000-SP	5	1346560000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1335030000

Safe I/O modules and safe power-feed modules

PF-O-2DI-SIL

- SIL 3 safety standard in accordance with IEC 62061 and DIN EN ISO 13849-1, category 4, PL e
- Connection for an emergency stop circuit
- OSSD output reports status to control unit
- Pulsed input circuit for wire breakage and short-circuit detection
- Restart: manual or using autostart

UR20-PF-O-2DI-SIL



Technical data

System data	
Interface	u-remote system bus
Transmission speed of system bus, max.	48 Mbit
Safety related data	
Achievable safety level, inputs	SIL 3 (IEC 61508)
Proportion of safety-related outages (SFF)	98 %
HFT (hardware fault tolerance), inputs	1
Supply	
Supply voltage for inputs	24 V DC +20 %/-15 %
Supply voltage for outputs	24 V DC +20 %/-15 %
Feed current for I _{OUT} (output current path) , max.	8050
Current consumption I _{IN} (power segment of the field bus coupler), typ.	8 mA
Digital inputs	
Wire break detection	Yes
Short-circuit detection	Yes
General data	
Weight	82 g
Dimensions H x W x D	120 mm / 11.5 mm / 76 mm
Note	

Ordering data

Module variants	
	Safety module, 2 digital inputs
Note	

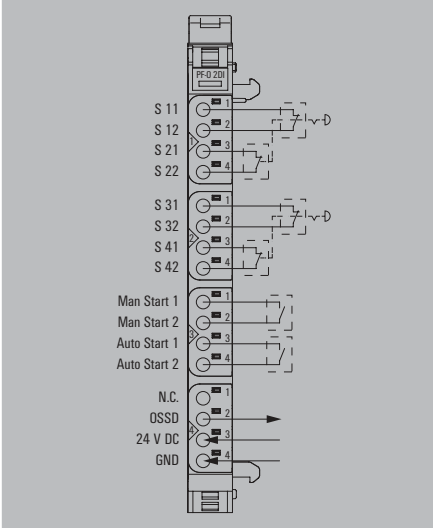
Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter

Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

Type	Qty.	Order No.
UR20-PF-O-2DI-SIL	1	1335050000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1335050000-SP	1	1347540000
UR20-BM-PF-O-SIL-SP	5	1350970000
UR20-PK-1335050000-SP	5	1346570000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1335050000

PF-O-2DI-DELAY-SIL

- SIL 3 safety standard in accordance with IEC 62061 and DIN EN ISO 13849-1, category 4, PL e
- Switch-off after adjustable delay
- Connection for an emergency stop circuit
- OSSD output reports status to control unit
- Pulsed input circuit for wire breakage and short-circuit detection
- Restart: manual or using autostart

Technical data

System data
Interface
Transmission speed of system bus, max.
Safety related data
Achievable safety level, inputs
Proportion of safety-related outages (SFF)
HFT (hardware fault tolerance), inputs
Supply
Supply voltage for inputs
Supply voltage for outputs
Feed current for I_{OUT} (output current path), max.
Current consumption I_{IN} (power segment of the field bus coupler), typ.
Digital inputs
Wire break detection
Short-circuit detection
General data
Weight
Dimensions H x W x D
Note

Ordering data

Module variants
Safety module, 2 digital inputs, delayed
Note

Accessories

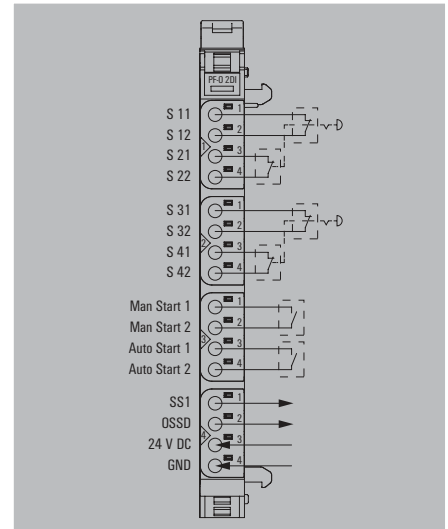
	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
Replacement parts	
	Electronic module
	Basic module
	Plug-in connector unit
Note	

UR20-PF-O-2DI-DELAY-SIL

	u-remote system bus
	48 Mbit
	SIL 3 (IEC 61508)
	98 %
	1
	24 V DC +20 %/-15 %
	24 V DC +20 %/-15 %
	8050
	8 mA
	Yes
	Yes
	84 g
	120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-PF-O-2DI-DELAY-SIL	1	1335040000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1335040000-SP	1	1347530000
UR20-BM-PF-O-SIL-SP	5	1350970000
UR20-PK-1335040000-SP	5	1484100000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1335040000

Power-feed modules

10 A feeding; input or output current path; diagnosis visualisation

Weidmüller power-feed modules are available to refresh the power of the input and output current path. These feed 10 A, monitored by the voltage diagnosis display, in the corresponding input or output path. The time-saving commissioning is guaranteed by the standard u-remote plug with proven and tested PUSH IN technology for reliable contacting. The power supply is monitored by a diagnosis display.

UR20-PF-I



UR20-PF-O



PF-I

- Power supply in input current path
- Power supply current 10 A
- Integrated diagnosis display

UR20-PF-I



Technical data

Supply
Supply voltage for inputs
Feed current for I _{in} (input current path) , max.
Current consumption I _{in} (the respective power segment)
General data
Weight
Dimensions H x W x D
Note

24 V DC +20 %/ -15 %
10000 mA
< 10 mA
76 g
120 mm / 11.5 mm / 76 mm

Ordering data

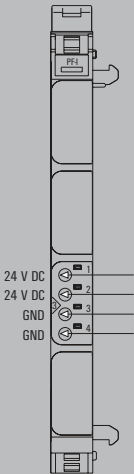
Module variants
Power supply module, 10 A
Note

Type	Qty.	Order No.
UR20-PF-I	1	1334710000

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1334710000-SP	1	1347380000
UR20-BM-PF-I-SP	5	1350940000
UR20-PK-1334710000-SP	5	1346460000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334710000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Power-feed modules

PF-0

- Power supply in output current path
- Power supply current 10 A
- Integrated diagnosis display

UR20-PF-0



Technical data

Supply
Supply voltage for outputs
Feed current for I _{OUT} (output current path) , max.
Current consumption from I _{OUT} (the respective power segment)
General data
Weight
Dimensions H x W x D
Note

24 V DC +20 %/ -15 %
10000 mA
< 10 mA
76 g
120 mm / 11.5 mm / 76 mm

Ordering data

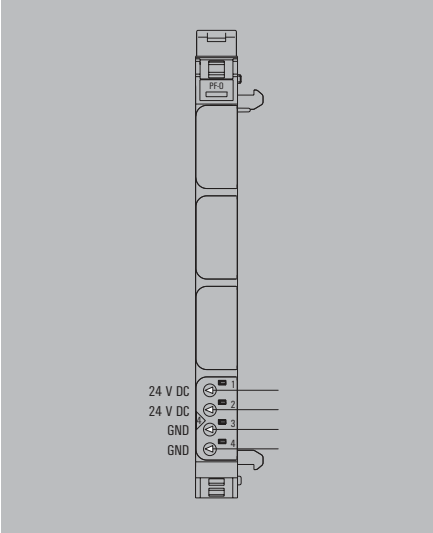
Module variants
Power supply module, 10 A
Note

Type	Qty.	Order No.
UR20-PF-0	1	1334740000

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1334740000-SP	1	1347420000
UR20-BM-PF-0-SP	5	1350950000
UR20-PK-1334740000-SP	5	1346480000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334740000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Accessories

Potential distribution modules; system accessories

A wide range of accessory modules is provided for the individual requirements of machine and plant construction. Various potential distribution modules are available for directly supplying sensors with 2-wire, 3-wire or 3-wire+FE connection technology from the remote I/O system. These provide 16 "PUSH IN" potential points and supply your application with each auxiliary potential available. An empty module, where the system bus and voltage supply are looped through, allows you to plan expansion slots in a system and to start these up without any interruptions if required.

UR20-ES



UR20-16AUX-I



UR20-16AUX-O



UR20-16AUX-FE



UR20-16AUX-GND-I



UR20-16AUX-GND-O



AUX

- Distribution of the various potentials
- Actuator and sensor supply
- 16 "PUSH IN" potential contacts

Technical data

Supply

Voltage supply

General data

Weight

Dimensions H x W x D

Note

Ordering data

Module variants

Potential distribution module

Note

Accessories

	Coding elements
	Termination kit
	Swivel marker
	Connection marker for pusher custom printing
	Connection marker for pusher neutral
	Module marker for custom printing
	Module marker for neutral
	Thermotransfer version (Material: Polyester)
	Thermotransfer version (material: polyester)
	Paper version for Laserprinter
	USB cable (USB A to Micro USB)

Replacement parts

Electronic module

Basic module
Plug-in connector unit

Note

UR20-16AUX



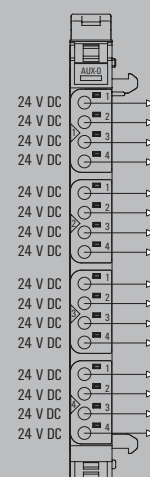
24 V DC +20 %/-15 %, from input or output current path / FE
84 g
120 mm / 11.5 mm / 76 mm

Type	Qty.	Order No.
UR20-16AUX-I	1	1334770000
UR20-16AUX-O	1	1334780000
UR20-16AUX-FE	1	1334790000
UR20-16AUX-GND-I	1	1334800000
UR20-16AUX-GND-O	1	1334810000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
IE-USB-A-MICRO-1.8M	1	1487980000

UR20-EM-1334770000-SP	1	1347450000
UR20-EM-1334780000-SP	1	1347470000
UR20-EM-1334790000-SP	1	1347480000
UR20-EM-1334800000-SP	1	1347490000
UR20-EM-1334810000-SP	1	1347500000
UR20-BM-SP	5	1350930000
UR20-PK-1334770000-SP	5	1346450000
UR20-PK-1334790000-SP	5	1346490000
UR20-PK-1334800000-SP	5	1346470000
UR20-PK-1334780000-SP	5	1484080000
UR20-PK-1334810000-SP	5	1484090000

1 roll = 1000 label = 1 Qty.
1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
	MSIP-REM-WMG-1334770000
	MSIP-REM-WMG-1334780000
MSIP	MSIP-REM-WMG-1334790000
	MSIP-REM-WMG-1334800000
	MSIP-REM-WMG-1334810000
ABS (American Bureau of Shipping)	
BSH (Federal Maritime and Hydrographic Agency of Germany)	
BV (Bureau Veritas)	
DNV GL (Det Norske Veritas) (Germanischer Lloyd)	
LR (Lloyd's Register)	
RINA (Registro Italiano Navale)	

Accessories

Empty slot module

- Forwarding of system bus and voltage paths
- Space for subsequent expansion
- Basis for all I/O modules

UR20-ES



Technical data

General data

Weight

70 g

Dimensions H x W x D

120 mm / 11.5 mm / 76 mm

Note

Ordering data

Module variants

Empty module

Note

Type	Qty.	Order No.
UR20-ES	1	1315770000

Accessories

Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (material: polyester)
Paper version for Laserprinter
Replacement parts
Electronic module
Basic module
Plug-in connector unit
Note

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE	1	1429910000
THM UR20 WS	1	1429420000
ESO UR20 DIN A4 WS	10	1429430000
UR20-EM-1315770000-SP	1	1347370000
UR20-BM-SP	5	1350930000
UR20-PK-1315770000-SP	5	1346510000
1 roll = 1000 label = 1 Qty. 1 sheet = 60 label = 1 Qty.		

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1315770000

Termination kit

- Includes an end plate and two end brackets

UR20-EBK



Ordering data

Module variants

Termination kit

Note

Type	Qty.	Order No.
UR20-EBK-ACC	5	1346610000

It goes without saying that Weidmüller also allows you to swap defective parts. The three-part modules can therefore be ordered as individual components.

Product	Order No.
UR20-FBC-PB-DP-V2	2614380000
UR20-FBC-PN-RT-V2	2566380000
UR20-FBC-EC	1334910000
UR20-FBC-MOD-TCP-V2	2476450000
UR20-FBC-EIP	1334920000
UR20-FBC-DN	1334900000
UR20-FBC-CAN	1334890000
UR20-FBC-PL	1334940000
UR20-4DI-P	1315170000
UR20-4DI-P-3W	2009360000
UR20-8DI-P-2W	1315180000
UR20-8DI-P-3W	1394400000
UR20-8DI-P-3W-HD	1315190000
UR20-16DI-P	1315200000
UR20-16DI-P-PLC-INT	1315210000
UR20-2DI-P-TS	1460140000
UR20-4DI-P-TS	1460150000
UR20-4DI-N	1315350000
UR20-8DI-N-3W	1315370000
UR20-16DI-N	1315390000
UR20-16DI-N-PLC-INT	1315400000
UR20-4DI-2W-230V-AC	1560070000
UR20-8DI-HSD-2W	2457240000
UR20-4DD-P	1315220000
UR20-4DD-P-2A	1315230000
UR20-4DD-PN-2A	1394420000
UR20-8DD-P	1315240000
UR20-8DD-P-2W-HD	1509830000
UR20-16DD-P	1315250000
UR20-16DD-P-PLC-INT	1315270000
UR20-4DD-N	1315410000
UR20-4DD-N-2A	1315420000
UR20-8DD-N	1315430000
UR20-16DD-N	1315440000
UR20-16DD-N-PLC-INT	1315450000
UR20-4DD-ISO-4A	2457250000
UR20-8DI0-P-3W-DIAG	2465530000
UR20-4RO-SSR-255	1315540000
UR20-4RO-CD-255	1315550000
UR20-2PWM-PN-0.5A	1315600000
UR20-2PWM-PN-2A	1315610000
UR20-1SM-50W-6DI-2DD-P	2489830000
UR20-4AI-U-12	1394390000
UR20-4AI-U-16	1315620000
UR20-4AI-U-16-DIAG	1315690000
UR20-4AI-U-16-HD	1506920000
UR20-4AI-U-16-DIAG-HD	1506910000
UR20-8AI-H-16-HD	1315650000
UR20-8AI-H-16-DIAG-HD	1315720000
UR20-8AI-PLC-INT	1315670000
UR20-4AI-U-DIF-16-DIAG	1993880000
UR20-4AI-T-CD-DIAG	1315710000
UR20-4AI-RTD-DIAG	1315700000
UR20-4AI-RTD-HP-DIAG	2465540000
UR20-4AI-R-HS-16-DIAG	2001670000
UR20-8AI-RTD-DIAG-2W	2555940000
UR20-2AI-SG-24-DIAG	1990070000
UR20-3EM-230V-AC	2007420000
UR20-4AO-U-16	1315680000
UR20-4AO-U-16-M	2453880000
UR20-4AO-U-16-DIAG	1315730000
UR20-4AO-U-16-M-DIAG	2453870000
UR20-4AO-U-16-HD	1510690000
UR20-4AO-U-16-DIAG-HD	1506930000
UR20-1CNT-100-100	1315570000
UR20-2CNT-100	1315590000
UR20-1CNT-500	1315580000
UR20-2F2CNT-100	1508080000
UR20-ISSI	1508090000
UR20-1CDM-232-485-422	1315750000
UR20-1CDM-SAI-PRO	2007430000
UR20-4CDM-IOLINK	1315740000
UR20-4DI-4DO-PN-FS0E-V2	2464580000
UR20-8DI-PN-FS0E-V2	2464600000
UR20-4DI-4DO-PN-FSPS-V2	2464570000
UR20-8DI-PN-FSPS-V2	2464590000
UR20-PF-0-1DI-SIL	1335030000
UR20-PF-0-2DI-SIL	1335050000
UR20-PF-0-2DI-DELAY-SIL	1335040000
UR20-PF-I	1334710000
UR20-PF-O	1334740000
UR20-16AUX-I	1334770000
UR20-16AUX-O	1334780000
UR20-16AUX-FE	1334790000
UR20-16AUX-GND-I	1334800000
UR20-16AUX-GND-O	1334810000
UR20-ES	1315770000
Note	

All Plug-in connector units: Qty. = 5

All electronic modules: Qty. = 1

All basic modules: Qty. = 5

System overview

Below you will find assistance for putting together your system. Please note the maximum number of 64 active modules and the packaging units for the accessories! More detailed technical data and product descriptions can be found here in the catalogue in the corresponding chapter.

At the bottom right-hand side of this page, you will find assistance for supplying the current paths.

1. What field bus are you using?

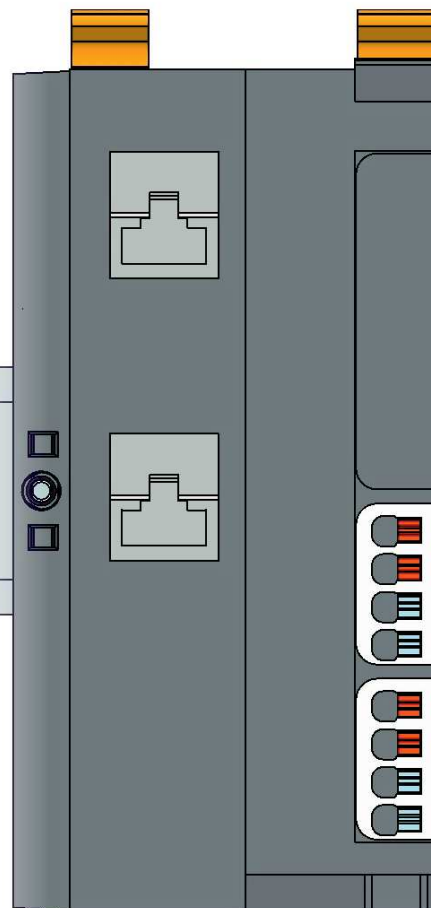
Bus	Type	Order No.	Page
PROFIBUS	UR20-FBC-PB-DP-V2	2614380000	B.5
PROFINET	UR20-FBC-PN-IRT-V2	2566380000	B.7
EtherCAT	UR20-FBC-EC	1334910000	B.9
Modbus	UR20-FBC-MOD-TCP-V2	2476450000	B.11
EtherNet/IP	UR20-FBC-EIP	1334920000	B.13
DeviceNet	UR20-FBC-DN	1334900000	B.15
CANopen	UR20-FBC-CAN	1334890000	B.17
POWERLINK	UR20-FBC-PL	1334940000	B.19

2. What signals do you want to process?

Digital inputs	Order No.	Page
UR20-4DI-P	1315170000	B.21
UR20-4DI-P-3W	2009360000	B.22
UR20-8DI-P-2W	1315180000	B.23
UR20-8DI-P-3W	1394400000	B.24
UR20-8DI-P-3W-HD	1315190000	B.25
UR20-16DI-P	1315200000	B.26
UR20-16DI-P-PLC-INT	1315210000	B.27
UR20-2DI-P-TS	1460140000	B.28
UR20-4DI-P-TS	1460150000	B.29
UR20-4DI-N	1315350000	B.30
UR20-8DI-N-3W	1315370000	B.31
UR20-16DI-N	1315390000	B.32
UR20-16DI-N-PLC-INT	1315400000	B.33
UR20-4DI-2W-230V-AC	1550070000	B.35
UR20-8DI-HSO-2W	2457240000	B.34
Digital outputs	Order No.	Page
UR20-4DO-P	1315220000	B.37
UR20-4DO-P-2A	1315230000	B.38
UR20-4DO-PN-2A	1394420000	B.39
UR20-8DO-P	1315240000	B.40
UR20-8DO-P-2W-HD	1509830000	B.41
UR20-16DO-P	1315250000	B.42
UR20-16DO-P-PLC-INT	1315270000	B.43
UR20-4DO-N	1315410000	B.44
UR20-4DO-N-2A	1315420000	B.45
UR20-8DO-N	1315430000	B.46
UR20-16DO-N	1315440000	B.47
UR20-16DO-N-PLC-INT	1315450000	B.48
UR20-4DO-ISO-4A	2457250000	B.49
UR20-8DO-P-3W-DIAG	2456530000	B.53
UR20-4RO-SSR-255	1315540000	B.50
UR20-4RO-CO-255	1315550000	B.51
UR20-2PWM-PN-0.5A	1315600000	B.55
UR20-2PWM-PN-2A	1315610000	B.56
UR20-1SM-50W-6DI2DO-P	2489830000	B.57

2. What signals do you want to process?

Analogue inputs	Order No.	Page
UR20-4AI-UI-12	1394390000	B.59
UR20-4AI-UI-16	1315620000	B.60
UR20-4AI-UI-16-DIAG	1315690000	B.61
UR20-4AI-UI-16-HD	1506920000	B.62
UR20-4AI-UI-16-DIAG-HD	1506910000	B.63
UR20-8AI-16-HD	1315650000	B.64
UR20-8AI-16-DIAG-HD	1315720000	B.65
UR20-8AI-PLC-INT	1315670000	B.66
UR20-4AI-UI-DIF-16-DIAG	1993880000	B.67
UR20-4AI-TC-DIAG	1315710000	B.74
UR20-4AI-RTD-DIAG	1315700000	B.71
UR20-4AI-RTD-HP-DIAG	2456540000	B.72
UR20-4AI-RHS-16-DIAG	2001670000	B.75
UR20-8AI-RTD-DIAG-2W	2555940000	B.73
UR20-2AI-SG-24-DIAG	1990070000	B.77
UR20-3EM-230V-AC	2007420000	B.79
Analogue outputs	Order No.	Page
UR20-4AO-UI-16	1315680000	B.81
UR20-4AO-UI-16-M	2453880000	B.82
UR20-4AO-UI-16-DIAG	1315730000	B.83
UR20-4AO-UI-16-M-DIAG	2453870000	B.84
UR20-4AO-UI-16-HD	1510690000	B.85
UR20-4AO-UI-16-DIAG-HD	1506930000	B.86
Digital counter- and communication modules	Order No.	Page
UR20-1CNT-100-1DO	1315570000	B.89
UR20-2CNT-100	1315590000	B.90
UR20-1CNT-500	1315580000	B.91
UR20-2FCNT-100	1508080000	B.92
UR20-1SSI	1508090000	B.93
UR20-1COM-232-485-422	1315750000	B.94
UR20-1COM-SAI-PRO	2007430000	B.95
UR20-4COM-IO-LINK	1315740000	B.96
Further functional modules	Order No.	Page
UR20-4DI-4DO-PN-FSOE-V2	2464580000	B.99
UR20-8DI-PN-FSOE-V2	2464600000	B.100
UR20-4DI-4DO-PN-FSPS-V2	2464570000	B.101
UR20-8DI-PN-FSPS-V2	2464590000	B.102



3. Do you need more than 10 A on the input or output path? Then you will need an additional supply! There is a sample calculation at the bottom of this page.

	Order No.	Page
UR20-PF-O-1DI-SIL	1335030000	B.103
UR20-PF-O-2DI-SIL	1335050000	B.104
UR20-PF-O-2DI-DELAY-SIL	1335040000	B.105
UR20-PF-I	1334710000	B.107
UR20-PF-O	1334740000	B.108

4. AUX and accessories

AUX	Order No.	Page
UR20-16AUX-I	1334770000	B.111
UR20-16AUX-O	1334780000	B.111
UR20-16AUX-FE	1334790000	B.111
UR20-16AUX-GND-I	1334800000	B.111
UR20-16AUX-GND-O	1334810000	B.111
Accessories		Page
Termination kit	1346610000	B.112
Swivel marker	1339920000	B.112
Connection marker for pusher custom printing	1323700000	B.112
Connection marker for pusher neutral	1323710000	B.112
Module marker for custom printing	1341610000	B.112
Module marker for neutral	1341630000	B.112
Empty module	1315770000	B.112
Thermotransfer version (Material: Polyester)	1429910000	B.112
Thermotransfer version (Material: Polyester)	1429420000	B.112
Paper version for Laserprinter	1429430000	B.112

The additional supply calculation is different for each application. Simultaneity factors and current requirement must be known. To assist you, we have produced the example shown here in a simplified form.

Our example uses a row of 8-DO modules, i.e. units which can hold four actuator connections each. The actual current needed and therefore the position for a power-feed module to supply the current path can be determined from the mathematical combination of current requirement and simultaneity factor. Please note that u-remote provides an input and an output current path. Both must be included in the additional supply calculation. The system voltage doesn't have to be taken into account.

Sample calculation

Module no.	Module type	Current requirement of connected devices (A)	Simultaneity factor	Current following calculation of simultaneity factor per module	Current requirement of system - cumulative	Current requirement of system - cumulative with UR20-PF-O
1st module	UR20-8DO-P	0.5	0.5	0.25	0.25	0.25
2nd module	UR20-8DO-P	0.3	0.5	0.15	0.4	0.4
3rd module	UR20-8DO-P	2.0	0.7	1.4	1.8	1.8
4th module	UR20-8DO-P	2.0	0.5	1	2.8	2.8
5th module	UR20-8DO-P	2.0	0.3	2	4.8	4.8
6th module	UR20-8DO-P	0.5	0.2	0.1	4.9	4.9
7th module	UR20-8DO-P	1.0	0.1	0.75	5.65	5.65
8th module	UR20-8DO-P	1.0	0.2	0.2	5.85	5.85
9th module	UR20-8DO-P	1.2	0.5	0.6	6.45	6.45
10th module	UR20-8DO-P	2.0	1.0	2	8.45	8.45
	UR20-PF-O					
11th module	UR20-8DO-P	2.0	1.0	2	10.45	2
12th module	UR20-8DO-P	3.0	1.0	1	11.45	3
13th module	UR20-8DO-P	2.0	1.0	2	13.45	5

Current requirement exceeds 10 A!

The output current path therefore needs an additional supply before the 11th module.

10 A supplied by the UR20-PF-O module.
The 1.55 A calculated as remaining after the 10th module must not be added to the 10 A after the UR20-PF-O module!

