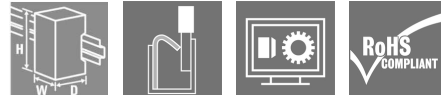


Automation Products - u-remote IP20 UR20-4AI-UI-12

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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Fon: +49 5231 14-0
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Product image



Inputs can be parameterised; 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 with 12- and 16-bit resolution, which record up to 4 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 can optionally connect sensors with 2- or 3-wire technology. The parameters for the measurement range can be individually set for each channel. In addition, each channel has its own status LED. A special variant for Weidmüller interface units enables current measurements with 16-bit resolution and maximum accuracy for 8 sensors at a time (0...20 mA or 4...20 mA).

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

General ordering data

Type	UR20-4AI-UI-12
Order No.	1394390000
Version	Remote I/O module, IP20, 4-channel, Analog signals, Input, Current/Voltage, 12 Bit
GTIN (EAN)	4050118195200
Qty.	1 pc(s).

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Technical data
Dimensions and weights

Width	11.5 mm	Width (inches)	0.453 inch
Height	120 mm	Height (inches)	4.724 inch
Depth	76 mm	Depth (inches)	2.992 inch
Mounting dimension - height	128 mm	Net weight	87 g

Temperatures

Storage temperature, max.	85 °C	Storage temperature, min.	-40 °C
Operating temperature	-20 °C ... +60 °C	Storage temperature	-40 °C ... +85 °C

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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analogue inputs

Accuracy	0.1% FSR	Conversion time	1 ms
Individual channel diagnosis	No	Internal resistance I	41.2 Ω
Internal resistance U	100 kΩ	Module diagnosis	Yes
Number of analogue inputs	4	Resolution	12-bit
Reverse polarity protection	Yes	Sensor connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	Yes	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

Connection data

Type of connection	PUSH IN	Wire connection cross section, finely stranded, max.	1.5 mm ²
Wire connection cross-section, finely stranded, min.	0.14 mm ²	Wire cross-section, finely stranded, max. (AWG)	AWG 16
Wire cross-section, finely stranded, min. (AWG)	AWG 26	Wire cross-section, solid, max.	1.5 mm ²
Wire cross-section, solid, max. (AWG)	AWG 16	Wire cross-section, solid, min.	0.14 mm ²
Wire cross-section, solid, min. (AWG)	AWG 26		

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Technical data

General data

Air humidity (operation)	10% to 95%, non-condensing as per DIN EN 61131-2	Air humidity (storage)	10% to 95%, non-condensing as per DIN EN 61131-2
Air humidity (transport)	10% to 95%, non-condensing as per DIN EN 61131-2	Air pressure (operation)	≥ 795 hPa (height ≤ 2000 m) as per DIN EN 61131-2
Air pressure (storage)	1013 hPa (height 0 m) to 700 hPa (height 3000 m) as per DIN EN 61131-2	Air pressure (transport)	1013 hPa (height 0 m) to 700 hPa (height 3000 m) as per DIN EN 61131-2
Pollution severity	2	Shock	15 g over 11 ms, half sinus wave, acc. to IEC 60068-2-27
Surge voltage category	II	Test voltage	500 V
UL 94 flammability rating	V-0	Vibration resistance	5 Hz ≤ f ≤ 8.4 Hz: 3.5-mm amplitude as per IEC 60068-2-6, 8.4 Hz ≤ f ≤ 150 Hz: 1 g acceleration as per IEC 60068-2-6

Power supply

Current consumption from I _{IN} (power segment of the field bus coupler), typ.	8 mA	Current consumption from I _{IN} (the respective power segment)	25 mA + sensor feed
Reverse polarity protection	Yes	Voltage supply	24 V DC +20 %/ -15 %, via the system bus

System data

Diagnostic data	1 Bit	Field bus protocol	CANopen, DeviceNet, EtherCAT, EtherNet/IP, Modbus/TCP, PROFINET IRT, PROFIBUS DP-V1, POWERLINK
Galvanic isolation	DC 500 V between current paths	Interface	u-remote system bus
Module type	Analogue input module	Parameter data	14 Byte
Process data	8 Byte	Transmission speed of system bus, max.	48 Mbit

Classifications

ETIM 6.0	EC001597	ETIM 7.0	EC001597
eClass 9.0	27-24-26-02	eClass 9.1	27-24-26-02
eClass 10.0	27-24-26-02		

Approvals

Approvals



ROHS Conform

Creation date May 3, 2020 8:58:21 AM CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

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Technical data**Downloads**

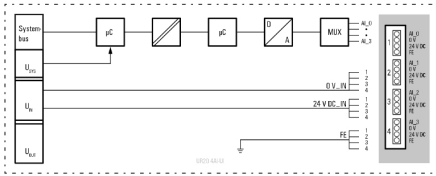
Approval/Certificate/Document of Conformity	Declaration of Conformity Compass safe distance certificate Lloyds Register certificate DNV/GL certificate ABS certificate RINA certificate Bureau Veritas - Type Approval Certificate PRS (Polish Register of Shipping) NIPPON KAIJI KYOKAI Certificate
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Engineering Data	STEP
Product Change Notification	Release-Notes - Firmware
Software	Current Firmware 4AI_UI Archiv Firmware UR20-4AI-UI
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN

**Automation Products - u-remote IP20
UR20-4AI-UI-12**

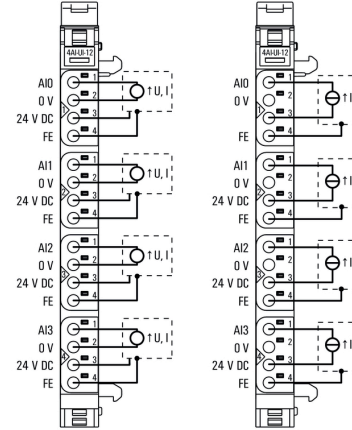
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Drawings

Block diagram



Connection diagram

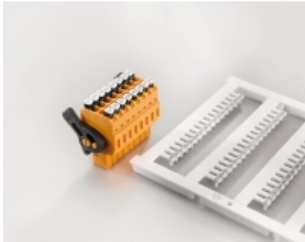


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Accessories

Blank



Weidmüller has established new market standards with its MultiCard product line. This system is being continually extended with over 200 variants and by consistently extending the portfolio.

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	PM 2.7/2.6 MC NE WS	Version
Order No.	1323710000	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in
GTIN (EAN)	4050118126778	mm (P): 3.50 Weidmueller, white
Qty.	960 pc(s).	

Accessories



Potential-distribution modules; system accessory

A wide range of accessory modules is available for individual requirements of machine and plant engineering. Various potential distribution modules are available for the supply of sensors with 2- to 4-wire connection technology directly from the remote I/O system. These offer 16 "PUSH IN" potential points and supply your application with any 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.

General ordering data

Type	UR20-EBK-ACC	Version
Order No.	1346610000	End bracket, ,
GTIN (EAN)	4050118151596	
Qty.	5 pc(s).	
Type	UR20-SM-ACC	Version
Order No.	1339920000	Cover, ,
GTIN (EAN)	4050118144727	
Qty.	20 pc(s).	

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Accessories

Custom printing



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.

Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

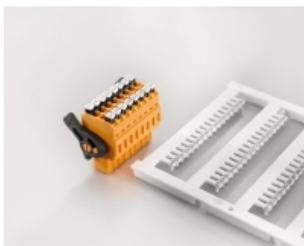
- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	DEK 5/8-11.5 MC SDR	Version
Order No.	1341610000	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118146059	Weidmueller, To customer specification
Qty.	100 pc(s).	

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General ordering data

Type	PM 2.7/2.6 MC SDR	Version
Order No.	1323700000	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in
GTIN (EAN)	4050118126761	mm (P): 3.50 Weidmueller, To customer specification
Qty.	192 pc(s).	

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Accessories

TS 35



General ordering data

Type	TS 35X7.5/LL 2M/ST/SZ	Version
Order No.	7915060000	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4032248296279	
Qty.	2 m	
Type	TS 35X7.5 2M/ST/ZN	Version
Order No.	0383400000	Rail, TS 35, TS 35 x 7.5, without slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4008190088026	
Qty.	2 m	
Type	TS 35X7.5/LL 2M/ST/ZN	Version
Order No.	0514500000	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4008190046019	
Qty.	2 m	
Type	TS 35X7.5/LL 1M/ST/ZN	Version
Order No.	0514510000	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4008190116620	
Qty.	1 m	
Type	TS 35X7.5 2M/CRN	Version
Order No.	1747350000	Rail, TS 35, TS 35 x 7.5, without slot, Stainless steel, rust-proof, untreated
GTIN (EAN)	4032248003372	
Qty.	2 m	
Type	TS 35X7.5 2M/AL/BK	Version
Order No.	0330800000	Rail, TS 35, TS 35 x 7.5, without slot, Aluminium, untreated
GTIN (EAN)	4008190100650	
Qty.	2 m	

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Accessories

Blank



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- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

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General ordering data

Type	DEK 5/8-11.5 MC NE WS	Version	
Order No.	1341630000	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00	
GTIN (EAN)	4050118145946	Weidmueller, white	
Qty.	500 pc(s).		