

## Automation Products - u-remote IP20 UR20-4AI-RTD-HP-DIAG

**Weidmüller Interface GmbH & Co. KG**  
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Germany  
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### Product image, Similar to illustration



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

The involvement of thermocouple and resistance-temperature sensors is indispensable for a variety of applications. Weidmüller's 4-channel input modules are suited for all common thermocouple elements and resistance temperature sensors. With an accuracy of 0.2% of the measurement-range end value and a resolution of 16 bit, cable break and values above or below the limit value are detected by means of individual channel diagnostics. Additional features such as an automatic 50 Hz to 60 Hz suppression or external as well as internal cold-junction compensation, as available with the RTD module, round off the scope of function.

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

### General ordering data

Type	UR20-4AI-RTD-HP-DIAG
Order No.	<a href="#">2456540000</a>
Version	Remote I/O module, IP20, Analog signals, Temperature, RTD
GTIN (EAN)	4050118471717

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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	88 g

### Temperatures

Operating temperature, max.	60 °C	Operating temperature, min.	-20 °C
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

Conversion time	adjustable, 36...240 ms	Individual channel diagnosis	Yes
Module diagnosis	Yes	Number	4
Resolution	16 Bit	Reverse polarity protection	Yes
Sensor connection	2-wire, 3-wire, 4-wire	Temperature coefficient	≤ 50 ppm/K
Type	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni 200, Ni500, Ni1000, Cu10, 40Ω, 80Ω, 150Ω, 300Ω, 500Ω, 1kΩ, 2kΩ, 4kΩ		

### Connection data

Type of connection	PUSH IN	Wire connection cross section, finely stranded, max.	1.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded, min.	0.14 mm <sup>2</sup>	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 <sup>2</sup>
Wire cross-section, solid, max. (AWG)	AWG 16	Wire cross-section, solid, min.	0.14 mm <sup>2</sup>
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 <sub>IN</sub> (power segment of the field bus coupler), typ.	8 mA	Current consumption from I <sub>IN</sub> (the respective power segment)	< 20 mA
Reverse polarity protection	Yes	Voltage supply	24 V DC +20%/ -15%, via the system bus

**System data**

Field bus protocol	CANopen, DeviceNet, EtherCAT, EtherNet/IP, Modbus/TCP, PROFINET IRT, PROFIBUS DP-V1, POWERLINK	Interface	u-remote system bus
Module type	Temperature module	Transmission speed of system bus, max.	48 Mbit

**Classifications**

ETIM 6.0	EC001597	eClass 6.2	27-24-26-01
eClass 9.0	27-24-26-02	eClass 9.1	27-24-26-02

**Approvals**

Approvals



ROHS

Conform

**Downloads**

Product Change Notification	<a href="#">Release-Notes - Firmware</a>
Software	<a href="#">4AI_RTU_HP-0008947-01_00_01-6</a> <a href="#">Firmware UR20-4AI-RTD-HP-DIAG</a>

Creation date 21 March 2019 15:57:27 CET

Catalogue status 15.03.2019 / We reserve the right to make technical changes.

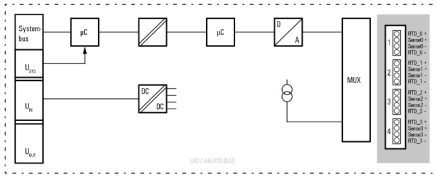
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**Drawings**

**Block diagram, Similar to illustration**



**Connection diagram, Similar to illustration**

