

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

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmuller.com



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 (UIN).

## General ordering data

Version	Remote I/O module, IP20, Analog signals, Input, 8-channel
Order No.	<a href="#">1315720000</a>
Type	UR20-8AI-I-16-DIAG-HD
GTIN (EAN)	4050118118827
Qty.	1 items

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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate no. (cULus)	E141197
Certificate no. (cULusEX)	E223527

**Dimensions and weights**

Depth	76 mm	Depth (inches)	2.9921 inch
Height	120 mm	Height (inches)	4.7244 inch
Width	11.5 mm	Width (inches)	0.4528 inch
Mounting dimension - height	128 mm	Net weight	74 g

**Temperatures**

Storage temperature	-40 °C ... +85 °C	Operating temperature	-20 °C...60 °C
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**Environmental Product Compliance**

RoHS Compliance Status	Compliant with exemption		
RoHS Exemption (if applicable/known)	7a, 7cl		
REACH SVHC	Lead 7439-92-1		
SCIP	82327f113-cd27-455a-ab5b-a62e1996dcf8		
Product Carbon Footprint	Cradle to gate	7,621 kg CO2 eq.	

**analogue inputs**

Short-circuit-proof	Yes	Reverse polarity protection	Yes
Accuracy	0.1% FSR	Resolution	16 Bit
Sensor supply	Yes	Conversion time	1 ms
Module diagnosis	Yes	Individual channel diagnosis	Yes
Input value	Current I (0...20 mA, 4...20 mA)	Sensor connection	2-wire, 3-wire, 3-wire + FE
Number analogue inputs	8	Internal resistance I	50 Ω

**Connection data**

Wire cross-section, finely stranded, max. (AWG)	AWG 22	Wire cross-section, finely stranded, min. (AWG)	AWG 26
Wire cross-section, solid, max. (AWG)	AWG 22	Wire cross-section, solid, min. (AWG)	AWG 26
Wire cross-section, solid, max.	0.35 mm <sup>2</sup>	Wire cross-section, solid, min.	0.14 mm <sup>2</sup>
Wire connection cross section, finely stranded, max.	0.35 mm <sup>2</sup>	Wire connection cross section, finely stranded, min.	0.14 mm <sup>2</sup>

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## Technical data

## General data

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	UL 94 flammability rating	V-0
Test voltage	500 V	Surge voltage category	II
Pollution severity	2	Mounting rail	TS 35
Air pressure (operation)	≥ 795 hPa (height ≤ 2000 m) as per DIN EN 61131-2	Air humidity (transport)	10% to 95%, non-condensing 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	Air pressure (storage)	1013 hPa (height 0 m) to 700 hPa (height 3000 m) as per DIN EN 61131-2
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
Shock	15 g over 11 ms, half sinus wave, acc. to IEC 60068-2-27		

## Power supply

Reverse polarity protection	Yes	Supply voltage	24 V DC +20 %/ -15 %, via the system bus
Current consumption from IIN (the respective power segment)	20 mA + load	Current consumption from I <sub>sys</sub> , typ.	8 mA

## System data

Module type	Analogue input module	Interface	u-remote system bus
Galvanic isolation	500 V DC between the current paths	Process data	16 Byte
Field bus protocol	PROFINET IRT, PROFINET RT, PROFIBUS DP-V1, EtherCAT, Modbus/TCP, EtherNet/IP, CANopen, DeviceNet, POWERLINK, CC-Link, CC-Link IE TSN	Transmission speed of system bus, max.	48 MBit/s

## Important note

Product information Note: Please order connector (1469340000) separately

## Classifications

ETIM 8.0	EC001596	ETIM 9.0	EC001596
ETIM 10.0	EC001596	ECLASS 14.0	27-24-26-01
ECLASS 15.0	27-24-26-01		

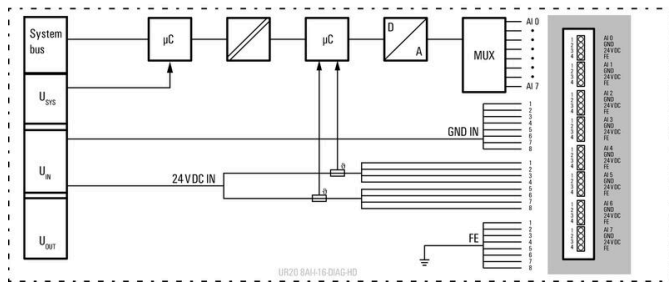
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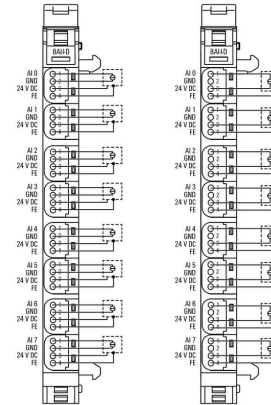
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**Drawings**

**Block diagram**



**Connection diagram**



**Explanation of abbreviations**

**Analogue input modules**

