

UR20-4AO-UI-16-DIAG

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

32760 Detmold

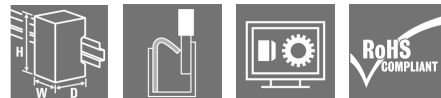
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Fax. +49 5231 14-2083

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Product image



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

The analogue output module controls up to 4 analogue actuators 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 an accuracy of 0.05% of the measurement-range end value. An actuator with 2-, 3- or 4-wire technology can be connected to each plug-in connector. The measurement range is defined channel-by-channel using parameterisation. In addition, each channel has its own status LED.

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

General ordering data

Version	Remote I/O module, IP20, Analog signals, Output, 4-channel, Current/Voltage
Order No.	1315730000
Type	UR20-4AO-UI-16-DIAG
GTIN (EAN)	4050118118667
Qty.	1 pc(s).
Replacement parts	1350930000 1518880000 1347330000

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Technical data

Dimensions and weights

Depth	76 mm	Depth (inches)	2.992 inch
Height	120 mm	Height (inches)	4.724 inch
Width	11.5 mm	Width (inches)	0.453 inch
Mounting dimension - height	128 mm	Net weight	86 g

Temperatures

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

analogue outputs

Accuracy	±0,1 % FSR max., 0,05 % FSR typ.		
Actuator connection	2-wire (automatic detection), 4-wire		
Actuator supply	min.	0 mA	
	max.	185 mA	
	nominal	185 mA	
Cross-talk between the channels	0.001 % FSR		
Individual channel diagnosis	Yes		
Load impedance current	< 600 Ω		
Max. error between T min. and T max.	220 ppm FSR		
Module diagnosis	Yes		
Monotonicity	Yes		
Number of analogue outputs	4		
Output current as per application	nominal	185 mA	
	min.	0 mA	
	max.	185 mA	
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)		
Repeat accuracy	< 1 mV eff.		
Resolution	16 Bit		
Response time	1 ms / 4 channels		
Short-circuit-proof	Yes		
Simultaneity factor	nominal	100 %	
	max.	100 %	
	min.	0 %	
Substitute values	Yes		
Temperature coefficient	20 ppm voltage / 31 ppm current measurement / °K		
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)		
load impedance voltage	> 1 kΩ (at >50 °C ambient temperature, max. total sensor current = 25 mA)		

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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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	Rail	TS 35
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 _{OUT} (the respective power segment)	85 mA	Current consumption from I _{sys} , typ.	8 mA
Voltage supply	24 V DC +20 %/ -15 %, via the system bus		

System data

Diagnostic data	2 Bit	Field bus protocol	CANopen, DeviceNet, EtherCAT, EtherNet/IP, Modbus/TCP, PROFINET IRT, PROFIBUS DP-V1, POWERLINK
Galvanic isolation	500 V DC between the current paths	Interface	u-remote system bus
Module type	Analogue output module	Process data	8 Byte
Transmission speed of system bus, max.	48 Mbit		

Classifications

ETIM 6.0	EC001596	ETIM 7.0	EC001596
ETIM 8.0	EC001596	ECLASS 9.0	27-24-26-01
ECLASS 9.1	27-24-26-01	ECLASS 10.0	27-24-26-01
ECLASS 11.0	27-24-26-01	ECLASS 12.0	27-24-26-01

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	82327f13-cd27-455a-ab5b-a62e1996dcf8

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Technical data

Approvals

Approvals

weidmueller.com

ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197
Certificate no. (cULusEX)	E223527

Downloads

Approval/Certificate/Document of Conformity	DEMKO15ATEX1525X UKCA Declaration of Conformity - EN CE Declaration of Conformity - DE
Engineering Data	CAD data – STEP Compatibility information – Combinability of UR20
Engineering Data	WSCAD, Zuken E3.S
Product Change Notification	Release-Notes - Firmware
Software	Firmware – Archive firmware UR20-4AO-UI Firmware – Current firmware UR20-4AO-UI
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN
Catalogues	Catalogues in PDF-format

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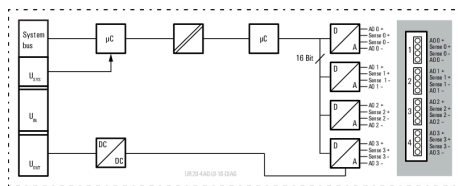
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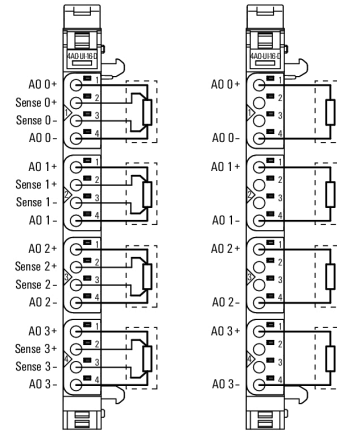
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Drawings

Block diagram



Connection diagram info@weidmueller.com



Explanation of abbreviations

Analogue output modules

