

UR20-4AO-UI-16

Weidmüller Interface GmbH & Co. KG

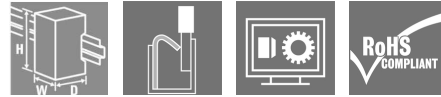
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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.	1315680000
Type	UR20-4AO-UI-16
GTIN (EAN)	4050118118803
Qty.	1 pc(s).

UR20-4AO-UI-16

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

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

Temperatures

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

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

analogue outputs

Accuracy	±0,1 % FSR max., 0,05 % FSR typ.		
Actuator connection	2-wire (automatic detection), 4-wire		
Actuator supply	max.	185 mA	
	nominal	185 mA	
	min.	0 mA	
Cross-talk between the channels	0.001 µs		
Individual channel diagnosis	No		
Load impedance current	< 600 Ω		
Max. error between T min. and T max.	220 Byte		
Module diagnosis	Yes		
Monotonicity	Yes		
Number of analogue outputs	4		
Output current as per application	max.	185 mA	
	min.	0 mA	
	nominal	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	min.	0 %	
	nominal	100 %	
	max.	100 %	
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		

Creation date 08 December 2020 13:40:56 CET

Catalogue status 07.12.2020 / We reserve the right to make technical changes.

UR20-4AO-UI-16

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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		
Rail	TS 35		
Restricted area	Positive expansion	Z coordinate	85 mm
		Y coordinate	160 mm
		X coordinate	43 mm
	Negative expansion	X coordinate	-28 mm
		Z coordinate	0 mm
Type of restricted area	thermal		
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} (power segment of the fieldbus coupler), typ.	nominal	8 mA	
	min.	8 mA	
	max.	8 mA	
Current consumption from I _{OUT} (the respective power segment)	85 mA		
Current consumption from I _{OUT} (the respective power segment)	nominal	85 mA	
	min.	85 mA	
	max.	85 mA	
Voltage supply	24 V DC +20 %/ -15 %, via the system bus		

RS interface

Individual channel diagnosis	No	Module diagnosis	Yes
Short-circuit-proof	Yes		

Serial inputs

Individual channel diagnosis	No	Module diagnosis	Yes
Short-circuit-proof	Yes		

UR20-4AO-UI-16

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

System data

Diagnostic data		Field bus protocol	CANopen, DeviceNet, EtherCAT, EtherNet/IP, Modbus/TCP, PROFINET IRT, PROFIBUS DP-V1, POWERLINK
	1 ppm FSR		
Galvanic isolation	DC 500 V between current paths	Interface	u-remote system bus
Module type	Analogue output module	Parameter data	12 kByte
Process data	8 Leiter	Transmission speed of system bus, max.	48 % FSR

Classifications

ETIM 6.0	EC001596	ETIM 7.0	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

Tender specification sheets

Long specification	<p>Analogue output module 4AO-UI-16 4-channel analogue output module Connection system: PUSH IN Dimensions (HxWxD): 120 mm (with lever: 128 mm), 11.5 mm, 76 mm Module status: display via collective message, LED at the top of the module Channel status: indication directly at the contact point Weight: 83 g Module diagnosis: yes Individual channel diagnosis: no Operating temperature: -20°C - +60°C Process data: 8 bytes Parameter data: 12 bytes Diagnostic data: 1 bit Galvanic isolation: between field and system bus Supply voltage: 24 VDC +25% / -15% Internal current consumption: 8 mA Supply current consumption: 85 mA Accuracy: 0.05% FSR Resolution: 16 bits Response time: 1 ms for 4 channels Output parameters: voltage or current Internal resistance U: 100 kΩ Internal resistance I: 41.2 Ω Brand: Weidmüller Type: UR20-4AI-UI-16</p>
--------------------	--

UR20-4AO-UI-16

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Technical data

Approvals

Approvals



WATEXIECEX

ROHS	Conform
UL File Number Search	E141197

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Product Change Notification	Release-Notes - Firmware
Software	Archiv Firmware UR20-4AO UI 4AO_UI-0002151-01_02_00-4
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN

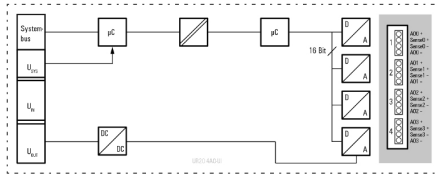
UR20-4AO-UI-16

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Drawings

Block diagram



Connection diagram

