

UR20-2PWM-PN-2A

Weidmüller Interface GmbH & Co. KG

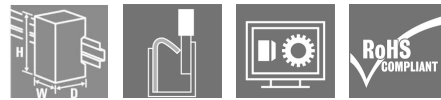
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



Pulse width modulation and stepper motor modules

As part of the u-remote system, Weidmüller offers a specialised solution for controlling small motors with a current requirement of 0.5 A to 2 A, which can also be used to control valve flaps. The pulse width modulation modules can be adjusted within the switching frequencies up to 40 kHz and the modules can also be switched in the motor control with the aid of push/pull output stages, e.g. to change the direction of rotation.

Weidmüller's stepper motor module is efficient and flexible for use in the automation of robots, handling systems or placement machines with stepper motors. Variably adjustable operating parameters as well as a wide range supply from 12 V DC to 50 V DC make the module flexibly applicable for various target applications. Six integrated, parameterizable encoder or digital inputs and two digital outputs with 0.5 A make the control module a complete solution in the smallest of spaces.

As with all modules of the u-remote system, the features are convincing - from the modular design and exchangeable electronics to the removable and pluggable terminal strip. The module electronics supplies the connected actuators from the output current path (UOUT)

General ordering data

Version	Remote I/O module, IP20, Digital signals, Special module, PWM, 2 A per channel
Order No.	1315610000
Type	UR20-2PWM-PN-2A
GTIN (EAN)	4050118118605
Qty.	1 pc(s).

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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
Mounting dimension - height	128 mm	Net weight	83 g
Width	11.5 mm	Width (inches)	0.453 inch

Temperatures

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

REACH SVHC	Lead 7439-92-1
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digital outputs

Accuracy	1 Bit		
Actuator connection	2-wire, 3-wire, 3-wire + FE		
Actuator supply	max.	750 mA	
	min.	0 mA	
	nominal	750 mA	
Data width	2 Byte Input, 12 Byte Output		
Feedback-free	Yes		
Individual channel diagnosis	No		
Max. response time, high	100 ns		
Max. response time, low	100 ns		
Module diagnosis	Yes		
Number of digital outputs	2		
Output current as per application	min.	0 mA	
	nominal	4,000 mA	
	max.	4,000 mA	
Output current per channel, max.	2,000 mA		
Output current per module, max.	4,000 mA		
Pulse duty factor	0--100% push/pull or push, parameterisable		
Resolution	32 Bit		
Short-circuit-proof	Yes		
Simultaneity factor	min.	0 %	
	max.	100 %	
	nominal	100 %	
Switching frequency, inductive load	Static, 6 Hz ... 40 kHz		
Switching frequency, lamp load	Static, 6 Hz ... 40 kHz		
Switching frequency, resistive load	Static, 6 Hz ... 40 kHz		
Type	DO PWM push / pull		

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 13:58:59 CET

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

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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		
Restricted area	Negative expansion	Z coordinate	0 mm
		Y coordinate	-40 mm
		X coordinate	-28 mm
	Positive expansion	X coordinate	43 mm
		Y coordinate	160 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.	min.	8 mA	
	max.	8 mA	
	nominal	8 mA	
Current consumption from I _{OUT} (the respective power segment)	40 mA		
Current consumption from I _{OUT} (the respective power segment)	nominal	40 mA	
	min.	40 mA	
	max.	40 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

Data width	2 Byte Input, 12 Byte Output	Individual channel diagnosis	No
Module diagnosis	Yes	Short-circuit-proof	Yes

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Technical data

System data

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	Functional module
Transmission speed backplane bus, max.48 % FSR		Transmission speed of system bus, max. 48 % FSR	

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	ECLASS 11.0	27-24-26-02

Approvals

Approvals



ROHS	Conform
UL File Number Search	E141197

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	STEP CoDeSys - Version 3
Engineering Data	EPLAN, WSCAD, Zuken E3.S
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN

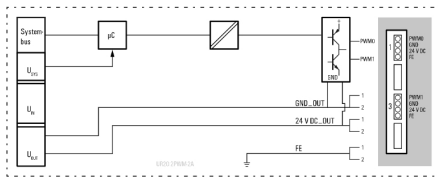
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Drawings

Block diagram



Connection diagram

