

UR20-1COM-232-485-422-V2**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image****Digital counter and communication modules
100/500 kHz; 32-bit counter resolution; individual
channel diagnosis**

Incremental and absolute value encoders have become indispensable in today's automated systems.

Developed especially for these applications, Weidmüller offers you various counter modules that can accept an input frequency up to 500 kHz. The synchronous-serial interface (SSI) module allows high precision positioning tasks to be realised with absolute value encoders.

The module can be parameterised for listening or master mode operation in order to cope with all fields of application. A module with pulse input is available to you for frequency measurement up to 100 kHz and the UR20-1CNT-500 offers an input that can accept frequencies up to 500 kHz. The UR20-2CNT-100 module has two independent counter inputs; it is supplemented with the UR20-1CNT-100-1DO module with one counter, which however offers additional options thanks to a latch, gate and reset input. This allows external control of the counter. In addition, this module can trigger an immediate event via a digital output using a set reference value. The UR20-1COM-232-485-422 module offers you extended communication options; for example devices can be integrated consistently in u-remote systems via an RS232, RS485 or RS422 interface. The UR20-1COM-SAI-PRO module presents a solution for connecting the con-

trol cabinet to the field. This gateway allows the integration of up to 15 decentral IP67 SAI-PRO Subbus modules per u-remote module.

The module electronics supply the connected sensors with power from the input current path (UIN).

General ordering data

Version	Remote I/O module, IP20, 1-channel, RS232/RS485/RS422 communication, PUSH IN connection
Order No.	2826800000
Type	UR20-1COM-232-485-422-V2
GTIN (EAN)	4064675363354
Qty.	1 pc(s).
Replacement parts	1350930000 2826870000

UR20-1COM-232-485-422-V2

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
Width	11.5 mm	Width (inches)	0.453 inch
Mounting dimension - height	128 mm	Net weight	89 g

Temperatures

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

digital inputs

Type	RS232, RS485/422
------	------------------

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		

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		

IP67 interface

Output current, supply voltage	max. 400 mA
--------------------------------	-------------

Power supply

Current consumption from I _{IN} (the respective power segment)	16 mA + load	Current consumption from I _{sys} , typ.	8 mA
Voltage supply	24 V DC +20 %/ -15 %, via the system bus		

UR20-1COM-232-485-422-V2

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

RS interface

Output current, supply voltage	max. 400 mA	Standards RS232	DIN 66020, DIN 66259, EIA-RS 232C, CCITT V.24/V.28
Standards RS485/422	DIN 66259 Part 1 und 3, EIA-RS 422/485, CCITT V.11		

System data

Field bus protocol	PROFINET IRT, PROFINET RT, PROFIBUS DP-V1, EtherCAT, Modbus/TCP, EtherNet/IP, CANopen, DeviceNet, POWERLINK, CC-Link, CC-Link IE TSN, IEC 61162-450	Galvanic isolation	500 V DC between the current paths
Interface	u-remote system bus	Module type	Functional module
Transmission speed of system bus, max. 48 Mbit			

Classifications

ETIM 6.0	EC001604	ETIM 7.0	EC001604
ETIM 8.0	EC001604	ETIM 9.0	EC001604
ECLASS 9.0	27-24-26-08	ECLASS 9.1	27-24-26-08
ECLASS 10.0	27-24-26-08	ECLASS 11.0	27-24-26-08
ECLASS 12.0	27-24-26-08	ECLASS 13.0	27-24-26-08
ECLASS 14.0	27-24-26-08		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	82327f13-cd27-4d55a-ab5b-a62e1996dcf8
RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl

Approvals

Approvals



ClassNK

UK
CA

ROHS	Conform
------	---------

UR20-1COM-232-485-422-V2

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

www.weidmueller.com

Technical data

Downloads

Approval/Certificate/Document of Conformity	KC certificate DNV certificate UKCA Declaration of Conformity - EN CE Declaration of Conformity - DE
Engineering Data	Library and function block – u-remote UR20 Library for Beckhoff TwinCAT3 - EN - V1.4.0 CAD data – STEP Application notes – UR20-1COM-RSxxx-V2 -Setup of Modbus and Serial communication in CODESYS
Software	Firmware – Current firmware UR20-1COM-232-485-422-V2
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN
Catalogues	Catalogues in PDF-format

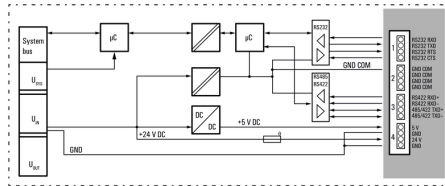
UR20-1COM-232-485-422-V2

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

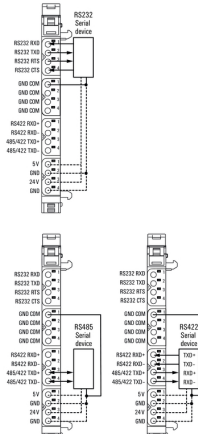
www.weidmueller.com

Drawings

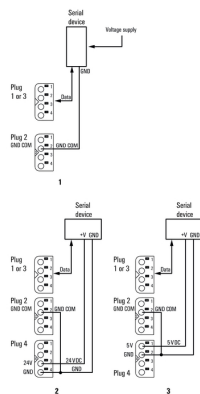
Block diagram



Connection diagram



Explanation of abbreviations



Digital counter- and communication- modules

