

UR20-FBC-EC

Weidmüller Interface GmbH & Co. KG

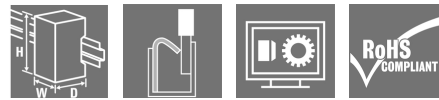
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



More performance. Simplified. u-remote.

Weidmüller u-remote – our innovative remote I/O concept with IP 20 which focuses purely on user benefits: tailored planning, faster installation, safer start-up, no more downtime. For considerably improved performance and greater productivity.

Reduce the size of your cabinets with u-remote, thanks to the narrowest modular design on the market and the need for fewer power-feed modules. Our u-remote technology also offers tool-free assembly, while the modular "sandwich" design and integrated web server speed up installation, both in the cabinet and machine. Status LEDs on the channel and each u-remote module enable reliable diagnosis and rapid service.

This and many other amazing ideas boost the availability of your machines and systems. And ensure smooth processes too. From planning to operation.

u-remote stands for "More Performance". Simplified

General ordering data

Version	Remote I/O fieldbus coupler, IP20, Ethernet, EtherCAT
Order No.	1334910000
Type	UR20-FBC-EC
GTIN (EAN)	4050118138283
Qty.	1 pc(s).
Replacement parts	1484440000

UR20-FBC-EC

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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	52 mm	Width (inches)	2.047 inch
Mounting dimension - height	128 mm	Net weight	227 g

Temperatures

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

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		

Power supply

Current consumption from I _{sys} , typ.	130 mA	
Feed current for I _{IN} (input current path)	max.	10,000 mA
	min.	10,000 mA
	nominal	10,000 mA
Feed current for I _{IN} (input current path), max.	10 A	
Feed current for I _{OUT} (output current path)	nominal	10,000 mA
	min.	10,000 mA
	max.	10,000 mA
Feed current for I _{OUT} (output current path), max.	10 A	
Feed current for the system, max.	4 A	

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Technical data

Supply voltage for outputs	24 V DC +20 %/ -15 %
Supply voltage system and inputs	24 V DC +20 %/ -15 %
Voltage supply	24 V DC +20 %/ -15 %, via the system bus

System data

Configuration interface	Micro USB 2.0	Connection type	2x RJ45 plug-in connectors
Diagnostic data	3,200 Byte	Field bus protocol	EtherCAT
Interface	u-remote system bus	Module type	Bus coupler
Parameter data	4 kByte	Process data	1,024 Byte
Transmission rate of field bus, max.	100 Mbit/s	Transmission speed of system bus, max.	48 Mbit/s
max. number of modules	64		

Classifications

ETIM 6.0	EC001603	ETIM 7.0	EC001603
ETIM 8.0	EC001603	ECLASS 9.0	27-24-26-07
ECLASS 9.1	27-24-26-07	ECLASS 10.0	27-24-26-07
ECLASS 11.0	27-24-26-07	ECLASS 12.0	27-24-26-07

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Technical data

Tender specification sheets

Long specification

EtherCAT field bus coupler with integrated 2-port switch, 100 Mbit/s for digital and analogue signals. The field bus coupler recognises the installed modules and uses them to generate a process image. The module sequence is not relevant. The field bus coupler is integrated into an application as an EtherCAT I/O device. Connection system: PUSH-IN terminal Transmission medium: Fieldbus transmission rate: 100 Mbit Transmission rate of the u-remote system bus: 48 Mbit Bus interface: 2 x RJ45 Voltage supply: 24 VDC +25% / -15% Feed-in current for system: 4 A Feed-in current for input modules: 10 A Feed-in current for output modules: 10 A Internal current consumption: 130 mA Process data: 8 kByte Parameter data: 1024 bytes Diagnostic data: 1024 bytes Number of I/O points: Number of I/O stations: Number of modules: max. 64 Protocol: EtherCAT Start-up aid: web server Configuration interface: USB Protection degree: IP20 Mounting position: horizontal, vertical with derating - see manual Efficiency of the power supply unit: Potential separation: between system path, input and output paths Current via power contacts: 10 A on input and on output paths Storage temperature: -40°C - +85°C Operating temperature: -20°C - +60°C Relative humidity: 10% - 90%, non-condensing Weight: 220 g Dimensions (WxHxD): 52 mm x 120 mm x 76 mm Approvals: UL, Ex, Brand: Weidmüller Type: UR20-FBC-EC

UR20-FBC-EC

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Technical data

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	98e19a7e-033b-4e68-93e3-c47b30de875e

Approvals

Approvals



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

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Technical data

Downloads

Approval/Certificate/Document of Conformity	Compass safe distance certificate Lloyds Register certificate DNV/GL certificate ABS certificate RINA certificate Bureau Veritas - Type Approval Certificate PRS (Polish Register of Shipping) NIPPON KAIJI KYOKAI Certificate DEMKO 15ATEX 1525X CCC certificate UKCA Declaration of Conformity - EN CE Declaration of Conformity - DE
Engineering Data	Library and function block – Beckhoff TwinCAT3 - EN - V1.1.0 Compatibility information – Combinability of UR20 CAD data – STEP Quick start guide – Connecting u-remote UR20 via EtherCAT Quick start guide – UR20-FBC-EC / UR20-1COM-SAI-PRO Quick Start Guide for Integration of SAI-Pro in EtherCAT Application notes – UR20-FBC-EC Application Note for Integration of UR20 EtherCAT in CODESYS
Engineering Data	WSCAD, Zuken E3.S
Product Change Notification	Release-Notes - Firmware, ESI and Supported modules list
Software	Firmware – Application_Note_Firmwareupdate_UR20_coupler_EN Firmware – Application_Note_Firmwareupdate_UR20_coupler_DE Library – Language_Pack_UR20_FBC Firmware – Archiv Firmware files EtherCAT coupler HW1 Firmware – Current Firmware file EtherCAT coupler HW1 Device description – Archiv ESI files EtherCAT coupler HW1 Device description – Current ESI file EtherCAT coupler HW1 Firmware – Archiv Firmware files EtherCAT coupler HW2 Firmware – Current Firmware file EtherCAT coupler HW2 Device description – Archiv ESI files EtherCAT coupler HW2 Device description – Current ESI file EtherCAT coupler HW2 Driver – USB driver Application notes – Use of UR20 Stations above 2000m sea level
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN MAN_U-REMOTE_FS_DE MAN_U-REMOTE_FS_EN MAN_UR20_WEBSERVER_DE MAN_UR20_WEBSERVER_EN 20211018 Security Advisory – Remote I/O fieldbus couplers (IP20) affected by INFRA:HALT vulnerabilities
Catalogues	Catalogues in PDF-format

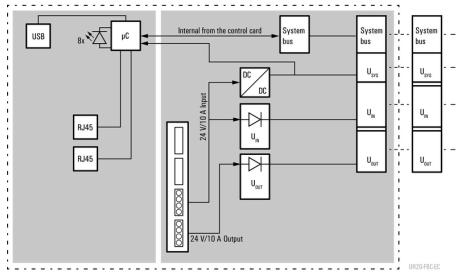
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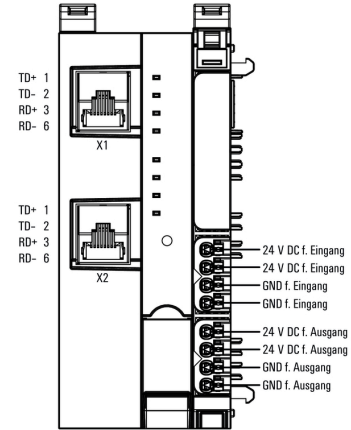
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Drawings

Block diagram

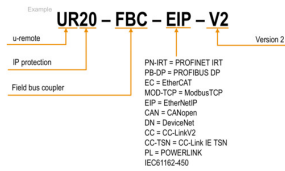


Connection diagram



Explanation of abbreviations

Field bus coupler



PN-IRT = PROFINET IRT
 PB-DP = PROFIBUS DP
 ES = EtherCAT
 MOD-TCP = ModbusTCP
 EIP = EtherNet/IP
 CAN = CANopen
 DN = DeviceNet
 CC = CC-LINK
 CC-TSN = CC-LINK E TSN
 PL = POWERLINK
 IEC61850-400

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Accessories

Accessories



Potential-distribution modules; system accessory

A wide range of accessory modules is available for individual requirements of machine and plant engineering. Various potential distribution modules are available for the supply of sensors with 2- to 4-wire connection technology directly from the remote I/O system. These offer 16 "PUSH IN" potential points and supply your application with any auxiliary potential available. An empty module, where the system bus and voltage supply are looped through, allows you to plan expansion slots in a system and to start these up without any interruptions if required.

General ordering data

Type	UR20-SM-ACC	Version
Order No.	1339920000	Cover, ,
GTIN (EAN)	4050118144727	
Qty.	20 pc(s).	
Type	UR20-EBK-ACC	Version
Order No.	1346610000	End bracket, ,
GTIN (EAN)	4050118151596	
Qty.	5 pc(s).	
Type	IE-USB-A-MICRO-1.8M	Version
Order No.	1487980000	USB cable, USB A, USB Micro, PVC, 1.8 m
GTIN (EAN)	4050118298451	
Qty.	1 pc(s).	

Blank



General ordering data

Type	PM 2.7/2.6 MC NE WS	Version
Order No.	1323710000	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in
GTIN (EAN)	4050118126778	mm (P): 3.50 Weidmueller, white
Qty.	960 pc(s).	

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Accessories

Custom printing



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.

Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

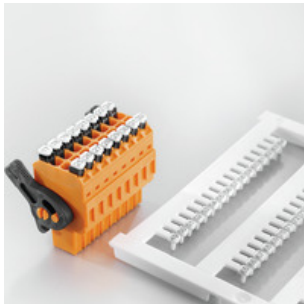
- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	DEK 5/8-11.5 MC SDR	Version	
Order No.	1341610000		Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118146059		Weidmueller, To customer specification
Qty.	100 pc(s).		

Custom printing



General ordering data

Type	PM 2.7/2.6 MC SDR	Version	
Order No.	1323700000		OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in mm (P): 3.50 Weidmueller, To customer specification
GTIN (EAN)	4050118126761		
Qty.	192 pc(s).		

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General ordering data

Type	DEK 5/8-11.5 MC NE WS	Version	
Order No.	1341630000		Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118145946		Weidmueller, white
Qty.	500 pc(s).		

Data sheet**UR20-FBC-EC**

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Replacement parts**Plugkit****General ordering data**

Type	UR20-PK-1334910000-SP	Version
Order No.	1484440000	Replacement part
GTIN (EAN)	4050118398519	
Qty.	5 pc(s).	