

**UC20-M4000**
**Weidmüller Interface GmbH & Co. KG**

 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

[www.weidmueller.com](http://www.weidmueller.com)


With u-control M3000, automation solutions can be perfectly integrated into the IoT. The powerful controller also works as an edge device for providing local information in the network and can be expanded by connecting function modules – ideal for automation and IIoT applications. u-control M4000 offers two additional CPU cores, two additional Ethernet interfaces and more RAM, NV RAM, and flash memory for complex edge computing in automation.

**General ordering data**

Version	Control CODESYS-based, u-OS, IP20, PUSH IN, 24 V DC +20 %/ -15 %, USB-C (3.1), MicroSD CARD, -40 °C...70 °C
Order No.	<a href="#">2839160000</a>
Type	UC20-M4000
GTIN (EAN)	4064675446125
Qty.	1 items

## Technical data

### Approvals

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate no. (cULusEX)	E223527

### Dimensions and weights

Depth	101 mm	Depth (inches)	3.9764 inch
Height	120 mm	Height (inches)	4.7244 inch
Width	80 mm	Width (inches)	3.1496 inch
Mounting dimension - height	120 mm	Net weight	604 g

### Temperatures

Storage temperature	-40 °C ... +85 °C	Operating temperature	-40 °C...70 °C
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### Probability of failure

SIL in compliance with IEC 61508	None	
MTBF	28 a	
MTBF	According to Standard	MIL-HDBK-217-FN2
	Operating time (hours), min.	250188 h
	Ambient temperature	50 °C

### Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6aI, 6c, 7a, 7cl
REACH SVHC	1, 2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) 110-71-4, 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol 119-47-1, Lead titanium trioxide 12060-00-3, Diboron trioxide 1303-86-2, Lead monoxide 1317-36-8, Lead 7439-92-1, Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8

### Connection data

Wire cross-section, finely stranded, max. (AWG)	AWG 26	Wire cross-section, finely stranded, min. (AWG)	AWG 16
Wire cross-section, solid, max. (AWG)	AWG 26	Wire cross-section, solid, min. (AWG)	AWG 16
Type of connection	PUSH IN	Wire cross-section, solid, max.	1.5 mm <sup>2</sup>
Wire cross-section, solid, min.	0.14 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	1.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	0.14 mm <sup>2</sup>		

### General data

UL 94 flammability rating	V-0		
Mounting rail	TS 35		
Air pressure (operation)	≥ 795 hPa as per IEC 61131-2		
Operating temperature installation dependent	Mounting position	horizontal	
	Operating altitude, max	2000 m	
	Operating temperature	min.	-40 °C
		max.	70 °C

## Technical data

	Mounting position	vertical
	Operating altitude, max	2000 m
	Operating temperature	min. -40 °C
		max. 50 °C
	Mounting position	horizontal
	Operating altitude, max	3000 m
	Operating temperature	min. -40 °C
		max. 60 °C
	Mounting position	vertical
	Operating altitude, max	3000 m
	Operating temperature	min. -40 °C
		max. 50 °C
Air humidity (transport)	10% to 95%, non-condensing as per IEC 61131-2	
Air pressure (transport)	≥ 700 hPa as per IEC 61131-2	
Air pressure (storage)	≥ 700 hPa as per IEC 61131-2	
Air humidity (operation)	10% to 95%, non-condensing as per IEC 61131-2	
Air humidity (storage)	10% to 95%, non-condensing as per IEC 61131-2	

## Power supply

Feed current for IIN (input current path), 10 A max.	Current consumption from Isys, typ.	116 mA
Supply voltage for outputs	24 V DC +20 %/ -15 %	Supply voltage system and inputs
Feed current for IOU (output current path), max.	10 A	24 V DC +20 %/ -15 %

## System data

Module type	Controller	Interface	2x Host (USB-A 2.0), 4x 1 Gbps (RJ45)
max. number of modules	64	Configuration interface	USB-C (3.1), MicroSD CARD
Program data memory expansion possible	Yes	Program data memory size	4 GB
Processor	Quad Core ARM Cortex A53, 1200 MHz	User data memory size	16 GB
Connection type	PUSH IN	Engineering tool	u-OS
Programming environment	CODESYS	Type of program data memory	DDR4
Memory (Flash)	16 GB	Real-time clock	Battery buffered
Type of user data memory	eMMC	Field bus protocol	EtherNet/IP, PROFINET

## Guarantee

Time interval	1 year
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## Important note

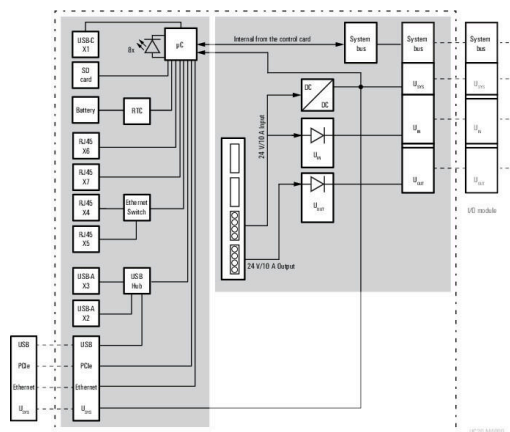
Product information	The matching end brackets are included with the control.
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## Classifications

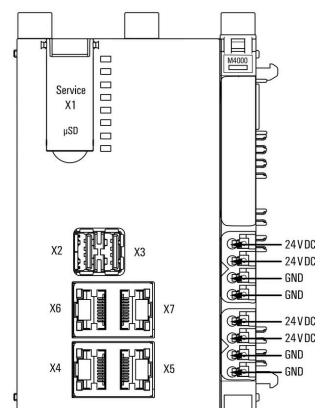
ETIM 8.0	EC000236	ETIM 9.0	EC000236
ETIM 10.0	EC000236	ECLASS 14.0	27-24-22-07
ECLASS 15.0	27-24-22-07		

## Drawings

### Block diagram



### Connection diagram



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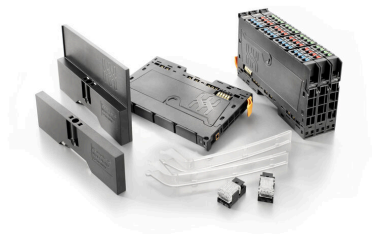
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## Accessories

### Accessories



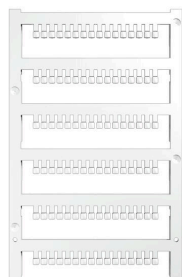
#### System accessory

Discover a wide range of accessories for your u-remote system - the ideal addition to make your applications even more efficient and flexible.

### General ordering data

Type	UR20-EBK-ACC	Version
Order No.	<a href="#">1346610000</a>	End bracket, ,
GTIN (EAN)	4050118151596	
Qty.	5 ST	
Type	UR20-SM-ACC	Version
Order No.	<a href="#">1339920000</a>	Cover, ,
GTIN (EAN)	4050118144727	
Qty.	20 ST	

### Blank



### General ordering data

Type	PM 2.7/2.6 MC NE WS	Version
Order No.	<a href="#">1323710000</a>	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch
GTIN (EAN)	4050118126778	in mm (P): 3.50 Weidmueller, white
Qty.	960 ST	

### Custom printing



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## Accessories

## General ordering data

Type	PM 2.7/2.6 MC SDR	Version
Order No.	<a href="#">1323700000</a>	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch
GTIN (EAN)	4050118126761	in mm (P): 3.50 Weidmueller, To customer specification
Qty.	192 ST	

## Blank



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 NE WS	Version
Order No.	<a href="#">1341630000</a>	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118145946	Weidmueller, white
Qty.	500 ST	

## Custom printing



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## General ordering data

Type	DEK 5/8-11.5 MC SDR	Version
Order No.	<a href="#">1341610000</a>	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118146059	Weidmueller, To customer specification
Qty.	100 ST	

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****USB cable - USB A - USB C**

Assembled IE cables

**General ordering data**

Type	IE-USB-A-C-2.0M	Version	
Order No.	<a href="#">2838380020</a>	USB cable, USB A, USB C, PVC, 2 m	
GTIN (EAN)	4064675444329		
Qty.	1 ST		

**Crimping tools**

Crimping tools for wire end ferrules, with and without plastic collars

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

**General ordering data**

Type	PZ 2.5 S	Version	
Order No.	<a href="#">2903690000</a>	0.14mm <sup>2</sup> , 2.5mm <sup>2</sup> , Trapezoidal crimp	
GTIN (EAN)	4099986027008		
Qty.	1 ST		