

# Product data sheet

Specifications



standalone processor, Modicon M580, 8MB, 61 Ethernet devices, 8 remote IO racks of X80

BMEP582040

## Main

Range of product	Modicon M580
Product or component type	Processor module

## Complementary

Number of racks	4
Local I/O processor capacity (discrete)	2048 I/O
Local I/O processor capacity (analog)	512 I/O
Number of application specific channel (local rack)	72
Application specific I/O	Serial link Counter Accurate time stamping HART Motion control SSI encoder
Checks	Process control
Control channels	Programmable loops
Integrated connection type	1 Ethernet TCP/IP for service port 2 Ethernet TCP/IP for device network USB type mini B
Number of remote I/O station	8 - 2 rack(s) per remote drop
Number of distributed equipment	64
Communication module processor capacity	2 Ethernet communication module 8 AS-Interface module
Communication service	DIO scanner RIO scanner
Memory description	Expandable flash, 4 GB for data storage Integrated RAM, 10 kB for system memory Integrated RAM, 8 MB for program process Integrated RAM, 768 kB for data process Integrated RAM, 2 MB for program safety Integrated RAM, 512 kB for data safety
Application structure	64 event tasks 2 auxiliary tasks 1 cyclic/periodic master task 1 periodic fast task
Number of instructions per ms	7.5 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 10 Kinst/ms 100 % Boolean

<b>Current consumption</b>	270 mA at 24 V DC
<b>MTBF reliability</b>	775000 H
<b>Marking</b>	CE
<b>Environment</b>	
<b>Vibration resistance</b>	3 gn
<b>Shock resistance</b>	15 gn
<b>Ambient air temperature for operation</b>	0...60 °C
<b>Ambient air temperature for storage</b>	-40...85 °C
<b>Operating altitude</b>	0...2000 m 2000...5000 m with derating factor
<b>Relative humidity</b>	5...95 % at 55 °C without condensation
<b>IP degree of protection</b>	IP20
<b>Directives</b>	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
<b>Product certifications</b>	CE UL CSA RCM EAC Merchant Navy
<b>Standards</b>	EN 61131-2 EN/IEC 61010-2-201 UL 61010-2-201 CSA C22.2 No 61010-2-201 IACS E10 EN/IEC 61000-6-5, interface type 1 and type 2 EN/IEC 61850-3, location G
<b>Environmental characteristic</b>	Safety Corrosion resistance Salt mist Dust resistant Hazardous location class I division 2
<b>Supply</b>	Internal power supply via rack
<b>Status LED</b>	1 LED (green) processor running (RUN) 1 LED (red) processor or system fault (ERR) 1 LED (red) I/O module fault (I/O) 1 LED (green) download in progress (DL) 1 LED (red) memory card or CPU flash fault (BACKUP) 1 LED (green/red) ETH MS (Ethernet port configuration status) 1 LED (green/red) Eth NS (Ethernet network status) 1 LED (green) processor in safety mode (SRUN) 1 LED (green) processor in maintenance mode (SMOD) 1 LED (red) I/O values overridden by user (FORCED IO)
<b>Product weight</b>	0.849 kg
<b>Packing Units</b>	
<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	9.200 cm
<b>Package 1 Width</b>	17.800 cm
<b>Package 1 Length</b>	25.200 cm
<b>Package 1 Weight</b>	874.000 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	6
<b>Package 2 Height</b>	30.000 cm

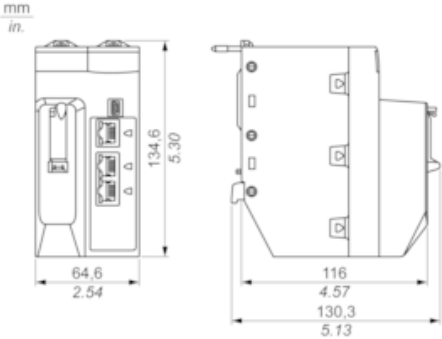
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.634 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	Yes
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

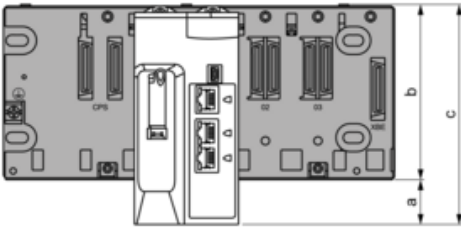
**CPU Module Only**

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**Modules Mounted on Racks**

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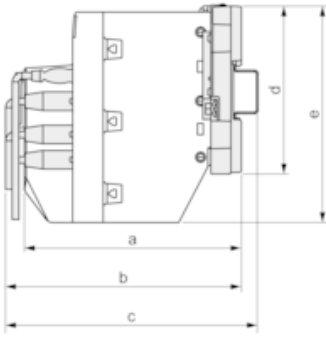
**a:** additional space below the rack to accommodate the height of the CPU. For an X Bus rack, the value is 30.9 mm (1.217 in.); for an Ethernet rack, the value is 29.49 mm (1.161 in.).

**b:** the height of the rack. For an X Bus rack, the height is 103.7 mm (4.083 in.); for an Ethernet rack, the height is 105.11 mm (4.138 in.).

**c:** the height of the main local rack, 134.6 mm (5.299 in.)

**Modules and Cables Mounted in an Enclosure**

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a: enclosure depth: 135 mm (5.315 in.)

b: wiring + module depth: > 146 mm (5.748 in.)

c: wiring + module + DIN rail depth: > 156 mm (6.142 in.)

d: rack height: for an X Bus rack 103.7 mm (4.083 in.); for an Ethernet rack, 105.11 mm (4.138 in.)

e: module height: 134.6 mm (5.299 in.)

**Recommended replacement(s)**