

Product data sheet

Specifications



Standalone processor, Modicon M580, 4MB, 61 Ethernet devices, 4 Local I/O racks (1024 Digital, 256 Analog)

BMEP581020

Main

Range of product	Modicon M580
Product or component type	Processor module

Complementary

Number of racks	4
Local I/O processor capacity (discrete)	1024 I/O
Local I/O processor capacity (analog)	256 I/O
Number of application specific channel (local rack)	36
Application specific I/O	Accurate time stamping Motion control Counter HART SSI encoder Serial link
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 distributed equipment	64
Communication module processor capacity	2 Ethernet communication module 8 AS-Interface module
Communication service	DIO scanner
Memory description	Integrated RAM, 4 MB for program Integrated RAM, 384 kB for data Expandable flash, 4 GB for data storage Integrated RAM, 10 kB for system memory
Application structure	1 periodic fast task 2 auxiliary tasks 1 cyclic/periodic master task 64 event tasks
Number of instructions per ms	7.5 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 10 Kinst/ms 100 % Boolean
Current consumption	270 mA at 24 V DC
MTBF reliability	600000 H

Marking	CE
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Environment

Vibration resistance	3 gn
Shock resistance	30 gn
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...85 °C
Operating altitude	0...2000 m 2000...5000 m with derating factor
Relative humidity	5...95 % at 55 °C without condensation
IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Product certifications	CE UL CSA RCM EAC Merchant Navy
Standards	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
Environmental characteristic	Hazardous location class I division 2
Supply	Internal power supply via rack
Status LED	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)
Net weight	0.849 kg

Packing Units

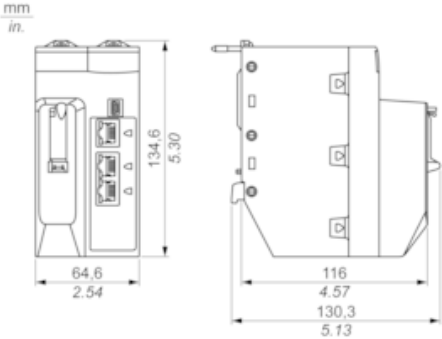
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	870.0 g
Package 1 Height	9.0 cm
Package 1 width	18.0 cm
Package 1 Length	25.2 cm
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Weight	5.66 kg
Package 2 Height	30.0 cm
Package 2 width	30.0 cm
Package 2 Length	40.0 cm

Offer Sustainability

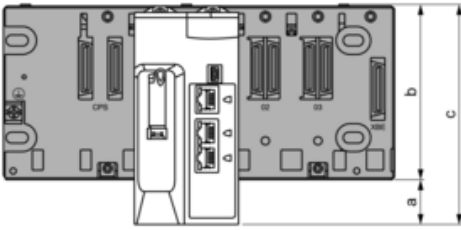
Sustainable offer status	Green Premium product
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REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Circularity Profile	End of Life Information
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 www.P65Warnings.ca.gov

CPU Module Only



Modules Mounted on Racks

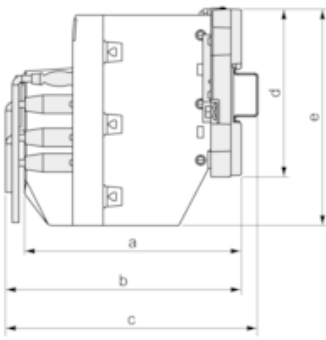


a: additional space below the rack to accommodate the height of the CPU. For an X Bus rack, the value is 30.9 mm (1.217 in.); for an Ethernet rack, the value is 29.49 mm (1.161 in.).

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



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.)