



Standalone processor, Modicon M580, 64MB, 61 Ethernet devices, 31 Remote I/O racks (X80 & Quantum)

BMEP586040

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Range of product	Modicon M580
Product or component type	Processor module
Complementary	
Number of racks	8
Local I/O processor capacity (discrete)	6144 I/O
Local I/O processor capacity (analog)	1536 I/O
Number of application specific channel (local rack)	216
Application specific I/O	Accurate time stamping Motion control SSI encoder HART Serial link Counter
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	31 - 2 rack(s) per remote drop
Number of distributed equipment	64
Communication module processor capacity	6 Ethernet communication module 24 AS-Interface module
Communication service	RIO scanner DIO scanner
Memory description	Expandable flash, 4 GB for data storage Integrated RAM, 10 kB for system memory Integrated RAM, 64 MB for program and data
Application structure	1 cyclic/periodic master task 128 event tasks 1 periodic fast task 2 auxiliary tasks
Number of instructions per ms	40 Kinst/ms 100 % Boolean 60 Kinst/ms 65 % Boolean + 35 % fixed arithmetic

Current consumption

295 mA at 24 V DC

MTBF reliability	600000 H
	CE
Marking	GE
Environment	
Vibration resistance	3 gn
Shock resistance	30 gn
Ambient air temperature for operation	060 °C
Ambient air temperature for storage	-4085 °C
Operating altitude	02000 m 20005000 m with derating factor
Relative humidity	595 % 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
Environmental characteristic Supply	Hazardous location class I division 2 Internal power supply via rack
Supply	Internal power supply via rack 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)
Supply Status LED	Internal power supply via rack 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) I/O values overrided by user (FORCED IO)
Supply Status LED Net weight	Internal power supply via rack 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) I/O values overrided by user (FORCED IO)
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Supply Status LED Net weight Packing Units Unit Type of Package 1	Internal power supply via rack 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 (gred) 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) I/O values overrided by user (FORCED IO) 0.849 kg
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Supply Status LED Net weight Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width	Internal power supply via rack 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) I/O values overrided by user (FORCED IO) 0.849 kg PCE 1 9.0 cm
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Supply Status LED Net weight Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2	Internal power supply via rack 1 LED (green) processor running (RUN) 1 LED (red) processor or system fault (ERR) 1 LED (gred) I/O module fault (I/O) 1 LED (green) download in progress (DL) 1 LED (green) download in progress (DL) 1 LED (green/red) ETH MS (Ethernet port configuration status) 1 LED (green/red) ETH MS (Ethernet network status) 1 LED (green) I/O values overrided by user (FORCED IO) 0.849 kg PCE 1 9.0 cm 17.5 cm 25.0 cm 900.0 g
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Offer Sustainability

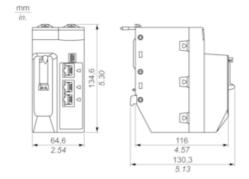
Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

Product datasheet

BMEP586040

Dimensions Drawings

CPU Module Only

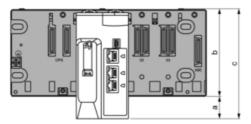


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Dimensions Drawings

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.).

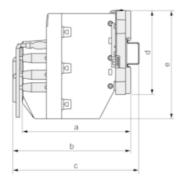
c: the height of the main local rack, 134.6 mm (5.299 in.)

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Dimensions Drawings

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.)