

# BMEP584020

standalone processor, Modicon M580, 16MB,  
125 Ethernet devices, 8 local IO racks of 4096  
digital, 1024 analog



## Main

Range of product	Modicon M580
Product or component type	Processor module

## Complementary

Number of racks	8
Local I/O processor capacity (discrete)	4096 I/O
Local I/O processor capacity (analog)	1024 I/O
Number of application specific channel (local rack)	144
Application specific I/O	HART Accurate time stamping SSI encoder Serial link Motion control 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 distributed equipment	128
Communication module processor capacity	8 AS-Interface module 4 Ethernet communication module
Communication service	DIO scanner
Memory description	Expandable flash, 4 GB for data storage Integrated RAM, 10 kB for system memory Integrated RAM, 16 MB for program Integrated RAM, 2048 kB for data
Application structure	1 cyclic/periodic master task 2 auxiliary tasks 1 periodic fast task 128 event tasks
Cybersecurity	Achilles certified DoS prevention IPSec SNMP logging Syslog protocol support Transport layer security Audit trail Embedded firewall Firmware signature Password protection Port hardening Secure communication (HTTPS) Security log

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Number of instructions per ms	30 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 40 Kinst/ms 100 % Boolean
Current consumption	295 mA at 24 V DC
MTBF reliability	775000 H
Marking	CE

## 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[RETURN]UL[RETURN]CSA[RETURN]RCM[RETURN]EAC[RETURN]Merchant Navy
Standards	IEC 61131-2 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

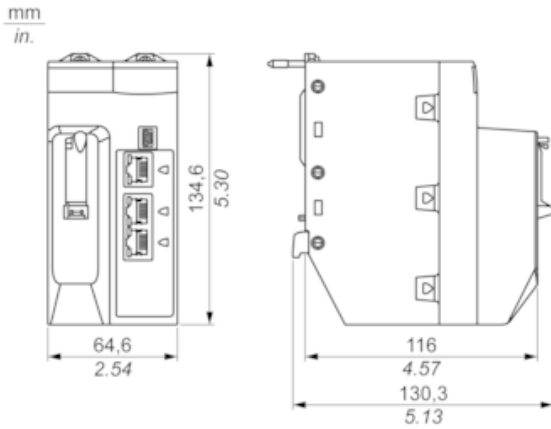
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.000 cm
Package 1 Width	18.000 cm
Package 1 Length	25.000 cm
Package 1 Weight	874.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.729 kg

## Offer Sustainability

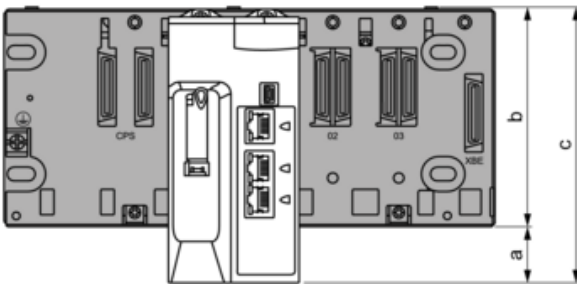
Sustainable offer status	Green Premium product
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 Yes

Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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

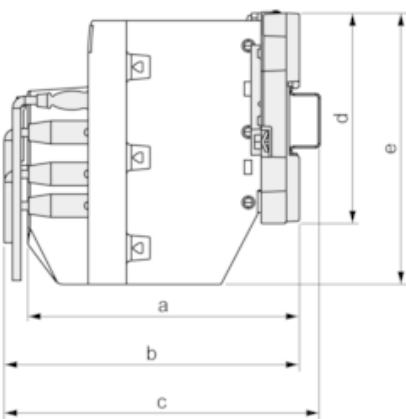


Modules Mounted on Racks



- 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.)