

# Product data sheet

Specifications



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

BMEP584020

## 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 service port 2 Ethernet TCP/IP 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 data storage Integrated RAM, 10 kB system memory Integrated RAM, 16 MB program Integrated RAM, 2048 kB data
Application Structure	1 cyclic/periodic master task 2 auxiliary tasks 1 periodic fast task 128 event tasks

Disclaimer: 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

<b>Cybersecurity</b>	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
<b>Number Of Instructions Per Ms</b>	30 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 40 Kinst/ms 100 % Boolean
<b>Current Consumption</b>	295 mA 24 V DC
<b>Mtbf Reliability</b>	775000 H
<b>Marking</b>	CE

## Environment

<b>Vibration Resistance</b>	3 gn
<b>Shock Resistance</b>	30 gn
<b>Ambient Air Temperature For Operation</b>	32...140 °F (0...60 °C)
<b>Ambient Air Temperature For Storage</b>	-40...185 °F (-40...85 °C)
<b>Operating Altitude</b>	0...2000 m 2000...5000 m with derating factor
<b>Relative Humidity</b>	5...95 % 131 °F (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>	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
<b>Environmental Characteristic</b>	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)
<b>Net Weight</b>	1.87 lb(US) (0.849 kg)

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1

<b>Package 1 Height</b>	3.54 in (9.000 cm)
<b>Package 1 Width</b>	7.09 in (18.000 cm)
<b>Package 1 Length</b>	9.84 in (25.000 cm)
<b>Package 1 Weight</b>	30.83 oz (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>	11.81 in (30.000 cm)
<b>Package 2 Width</b>	11.81 in (30.000 cm)
<b>Package 2 Length</b>	15.75 in (40.000 cm)
<b>Package 2 Weight</b>	12.63 lb(US) (5.729 kg)

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

## Well-being performance

Mercury Free

Rohs Exemption Information Yes

## Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)

China Rohs Regulation [China RoHS declaration](#)

Environmental Disclosure [Product Environmental Profile](#)

Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

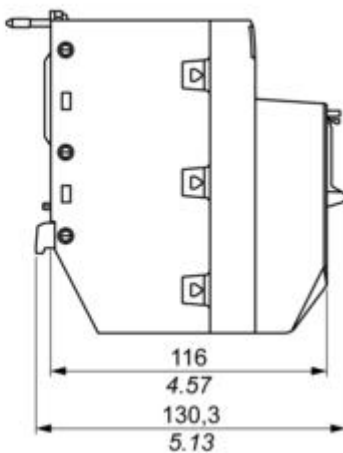
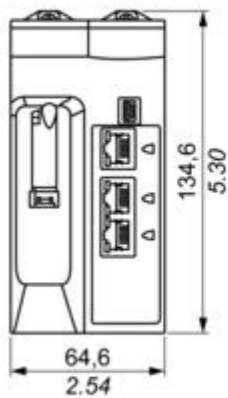
Circularity Profile [End of Life Information](#)

Dimensions Drawings

CPU Module Only

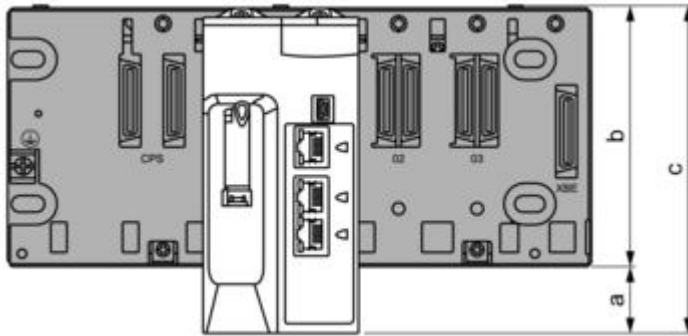
---

mm  
in.



**Modules Mounted on Racks**

---



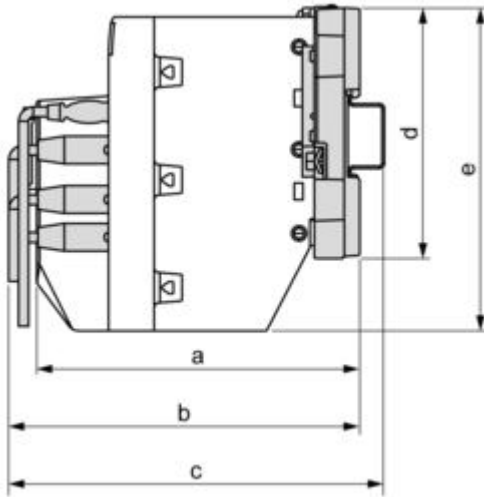
**a:** additional space below the rack to accommodate the height of the CPU. For an X Bus rack, the value is 30.9 mm (1.217 in.); for an Ethernet rack, the value is 29.49 mm (1.161 in.).

**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.)