Product data sheet

Specifications



standalone processor, Modicon M580, 4MB, 61 Ethernet devices, 4 local IO racks of 1024 digital, 256 analog [TAA]

BMEP581020

Product availability: Stock - Normally stocked in distribution facility

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 service port 2 Ethernet TCP/IP device network USB type mini B
Number of distributed equipment	64
Communication module processor capacity	2 Ethernet communication module 2 AS-Interface module
Communication Service	DIO scanner
Memory description	Integrated RAM, 4 MB program Integrated RAM, 384 kB data Expandable flash, 4 GB data storage Integrated RAM, 10 kB system memory
Application structure	1 periodic fast task 2 auxiliary tasks 1 cyclic/periodic master task 64 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

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Cybersecurity	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 RBAC user management PKI digital certificate authentication Modbus TLS (Modbus Secure Explicit) Centralised certificate management NIS2.0 compliance EU CRA compliance
Number of instructions per ms	30 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 40 Kinst/ms 100 % Boolean
Current consumption	270 mA 24 V DC
MTBF reliability	775000 H
Marking	CE

Environment

Vibration resistance	3 gn
Shock resistance	30 gn
Ambient Air Temperature for Operation	32…140 °F (0…60 °C)
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Operating altitude	0...6561.68 ft (0...2000 m) 2000...5000 m with derating factor
Relative humidity	5…95 % 131 °F (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 UKCA
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	1.872 lb(US) (0.849 kg)

Ordering and shipping details

Category	US1PC3418161
Discount Schedule	PC34
GTIN	3595864174303
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.543 in (9.000 cm)
Package 1 Width	7.008 in (17.800 cm)
Package 1 Length	9.921 in (25.200 cm)
Package weight(Lbs)	30.723 oz (871.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	11.8 in (30 cm)
Package 2 Width	11.8 in (30 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	12.478 lb(US) (5.660 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	48
Package 3 Height	29.528 in (75.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	121.872 lb(US) (55.280 kg)

Compliance

Compliance	TAA Compliant BAA Compliant via COTS

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**230 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**64 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**166 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.4 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**4eb70ab0-978b-4773-a441-0cc20d6144a1**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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**

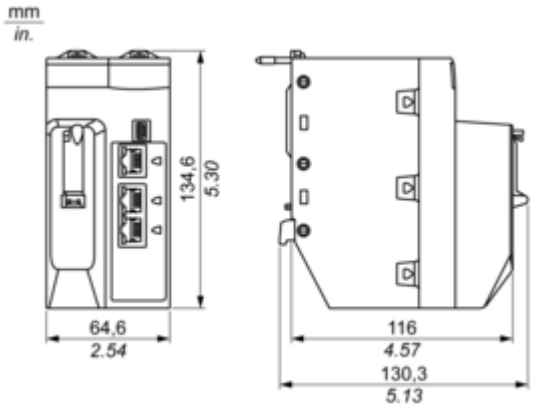
Use Again

Repack and remanufacture

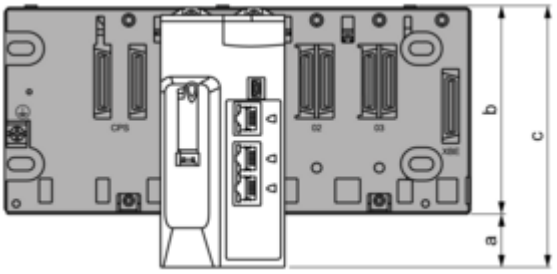
Circularity Profile	**End of Life Information**
Take-back	**No**

Dimensions Drawings

CPU Module Only

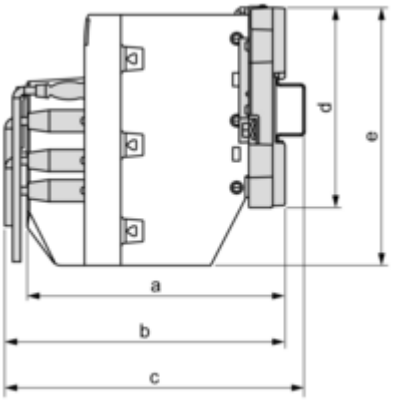


Modules Mounted on Racks



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.)

Image of product / Alternate images

Alternative






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M580



