Product data sheet

Specifications



standalone processor, Modicon M580, 8MB, 61 Ethernet devices, 8 remote IO racks of X80, for severe environment [TAA]

BMEP582040H

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon M580
Product or Component Type	Processor module
Product Specific Application	For severe environments

Complementary

Number of racks	4
Local I/O processor capacity (discrete)	2048 I/O
Local I/O processor capacity (analog)	512 I/O
Number of application specific channel (local rack)	72
Application specific I/O	Counter HART SSI encoder Accurate time stamping Motion control 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 remote I/O station	8 - 2 remote drop
Number of distributed equipment	64
Communication module processor capacity	2 Ethernet communication module 16 AS-Interface module
Communication Service	RIO scanner DIO scanner
Memory description	Expandable flash, 4 GB data storage Integrated RAM, 10 kB system memory Integrated RAM, 8 MB program Integrated RAM, 768 kB data
Application structure	1 periodic fast task 64 event tasks 1 cyclic/periodic master task 2 auxiliary tasks
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

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

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

Marking	CE

Environment

Vibration resistance	3 gn
Shock resistance	30 gn
Ambient Air Temperature for Operation	-13…158 °F (-25…70 °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 2014/34/EU - ATEX directive
Product certifications	CE UL CSA RCM EAC Merchant Navy ATEX zone 2/22 IECEx zone 2/22
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 IEC 60079-0
Environmental characteristic	Gas resistant class Gx ISA S71.04 Gas resistant class 3C4 IEC 60721-3-3 Dust resistant class 3S4 IEC 60721-3-3 Sand resistant class 3S4 IEC 60721-3-3 Salt resistant level 2 IEC 68252 Mold growth resistant class 3B2 IEC 60721-3-3 Fungal spore resistant class 3B2 IEC 60721-3-3 Hazardous location class I division 2
Protective treatment	Conformal coating
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)
Product Weight	1.872 lb(US) (0.849 kg)

Ordering and shipping details

Category	US1PC3418161
Discount Schedule	PC34
GTIN	3595864174495
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	7.087 in (18.000 cm)
Package 1 Length	10.039 in (25.500 cm)
Package weight(Lbs)	31.076 oz (881.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	12.566 lb(US) (5.700 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	**232 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**66 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	**No**
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 Longer

Lifetime extension

Repair	**No**

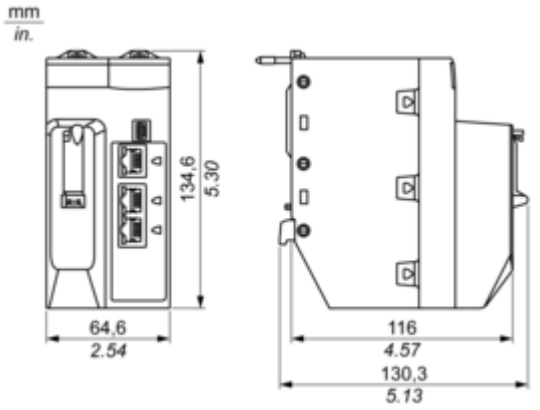
Use Again

Repack and remanufacture

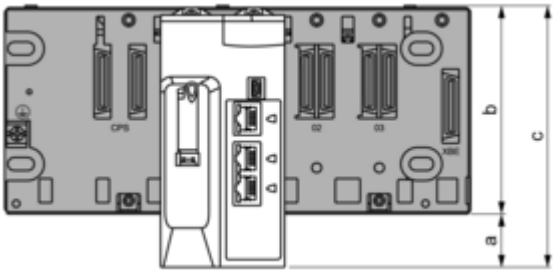
Circularity Profile	End of Life Information
Take-back	**No**

Dimensions Drawings

CPU Module Only

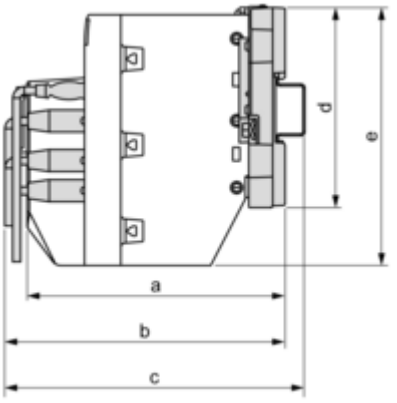


Modules Mounted on Racks



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



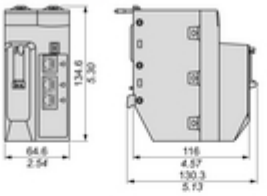
a: enclosure depth: 135 mm (5.315 in.)
b: wiring + module depth: > 146 mm (5.748 in.)
c: wiring + module + DIN rail depth: > 156 mm (6.142 in.)
d: rack height: for an X Bus rack 103.7 mm (4.083 in.); for an Ethernet rack, 105.11 mm (4.138 in.)
e: module height: 134.6 mm (5.299 in.)

Technical Illustration

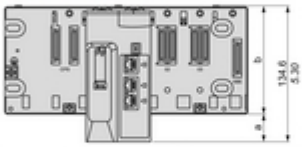
Dimensions

mm
in.

CPU Module Only

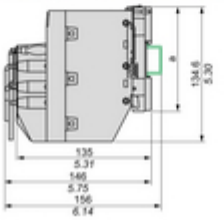


Modules Mounted on Racks



a : X Bus rack 30.9 mm (1.217 in.), Ethernet rack 29.49 mm (1.161 in.)
b : X Bus rack 103.7 mm (4.083 in.), Ethernet rack 105.11 mm (4.138 in.)

Modules and Cables Mounted in an Enclosure



a : X Bus rack 103.7 mm (4.083 in.), Ethernet rack 105.11 mm (4.138 in.)

Image of product / Alternate images

Alternative






M580
01
Service
02
Dual port
03
Device Network





