Product datasheet

Specifications

standalone processor, Modicon M580, 8MB, 125 Ethernet devices, 4 local IO racks of 2045 digital, 512 analog, severe environment

BMEP582020H

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	Accurate time stamping Counter SSI encoder HART Serial link Motion control
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	2 Ethernet communication module 4 AS-Interface module
Communication service	DIO scanner
Memory description	Expandable flash, 4 GB for data storage Integrated RAM, 10 kB for system memory Integrated RAM, 8 MB for program Integrated RAM, 768 kB for data
Application structure	2 auxiliary tasks 64 event tasks 1 cyclic/periodic master task 1 periodic fast task
Number of instructions per ms	30 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 40 Kinst/ms 100 % Boolean
Current consumption	270 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	-25…70 °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 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 conforming to ISA S71.04 Gas resistant class 3C4 conforming to IEC 60721-3-3 Dust resistant class 3S4 conforming to IEC 60721-3-3 Sand resistant class 3S4 conforming to IEC 60721-3-3 Salt resistant level 2 conforming to IEC 68252 Mold growth resistant class 3B2 conforming to IEC 60721-3-3 Fungal spore resistant class 3B2 conforming to 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)
Net weight	0.849 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.500 cm
Package 1 Width	18.000 cm
Package 1 Length	26.000 cm
Package 1 Weight	883.000 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	5.901 kg

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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	232
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	4eb70ab0-978b-4773-a441-0cc20d6144a1
REACh Regulation	REACh Declaration

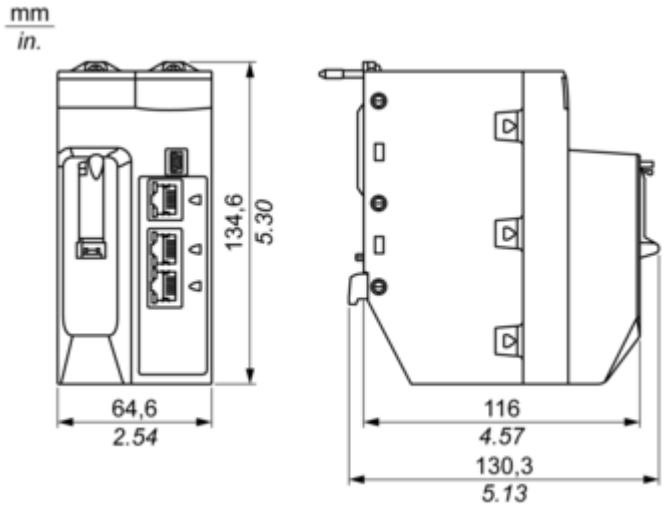
Use Again

Repack and remanufacture

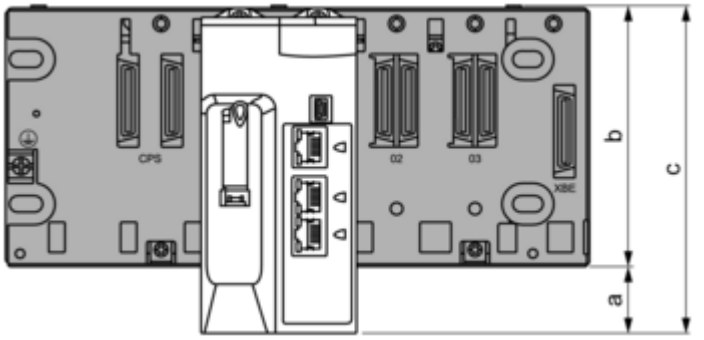
Circularity Profile	End of Life Information
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

CPU Module Only

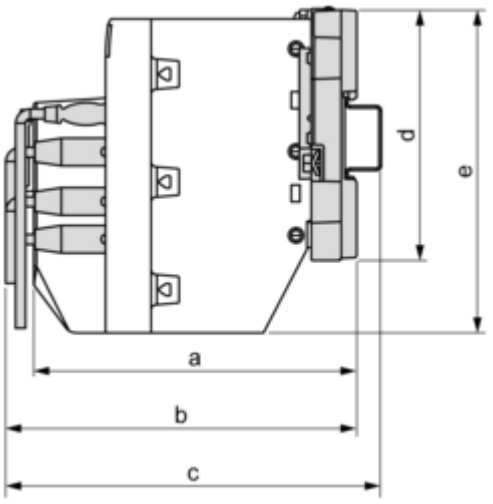


Modules Mounted on Racks



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.)