

BMEP584040S

standalone safety processor, Modicon M580,
16MB, 61 Ethernet devices, 16 remote IO racks
of X80 and Quantum, 64 CIP safety devices



Main

Range of Product	Modicon M580
Product or Component Type	Processor module
Impregnation material	Conformal coated

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	Counter Motion control SSI encoder Accurate time stamping Serial link HART
Checks	Safety control 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	16 - 2 remote drop
Number of distributed equipment	64
Number of CIP safety IO devices	64
Communication module processor capacity	8 AS-Interface module 4 Ethernet communication module
Communication Service	RIO scanner DIO scanner
Memory description	Expandable flash, 4 GB data storage Integrated RAM, 10 kB system memory Integrated RAM, 16 MB program process Integrated RAM, 2048 kB data process Integrated RAM, 4 MB program safety Integrated RAM, 1024 kB data safety
Application structure	2 auxiliary tasks 1 periodic safe task 128 event tasks 1 periodic fast task 1 cyclic/periodic master task
Number of instructions per ms	30 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 40 Kinst/ms 100 % Boolean
Current consumption	295 mA 24 V DC
MTBF reliability	775000 H
Marking	CE

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.

Environment

Vibration resistance	3 gn
Shock resistance	15 gn
Ambient Air Temperature for Operation	-13...140 °F (-25...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	2014/30/EU - electromagnetic compatibility 2006/42/EC - machinery 2014/34/EU - ATEX directive
Product certifications	CE[RETURN]UL[RETURN]CSA[RETURN]RCM[RETURN]EAC[RETURN]Merchant Navy[RETURN]ATEX zone 2/22[RETURN]IECEx zone 2/22[RETURN]TÜV
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	Hazardous location class I division 2 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
Protective treatment	Conformal coating
Safety level	SIL 3 IEC 61508 SIL 3 IEC 61511 SILCL 3 IEC 62061 SILCL 3 ISO 13849-1 category 4 SIL 4 EN 50126 SIL 4 EN 50128 SIL 4 EN 50129
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) 1 LED (Green) processor in safety mode (SRUN) 1 LED (Green) processor in maintenance mode (SMOD) 1 LED (Red) I/O values overridden by user (FORCED IO)
Net Weight	1.87 lb(US) (0.849 kg)

Ordering and shipping details

Category	18161-MODICON M580 CONTROLLERS HSBY
Discount Schedule	PC34
GTIN	3606481204967
Returnability	Yes
Country of origin	FR

Packing Units

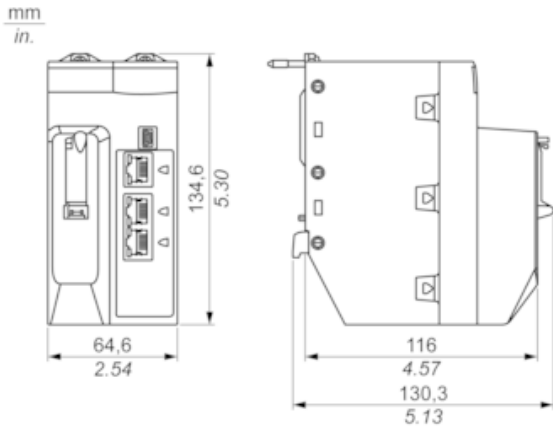
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.50 in (8.900 cm)
Package 1 Width	7.01 in (17.800 cm)
Package 1 Length	9.92 in (25.200 cm)

Package 1 Weight	31.04 oz (880.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	12.69 lb(US) (5.758 kg)

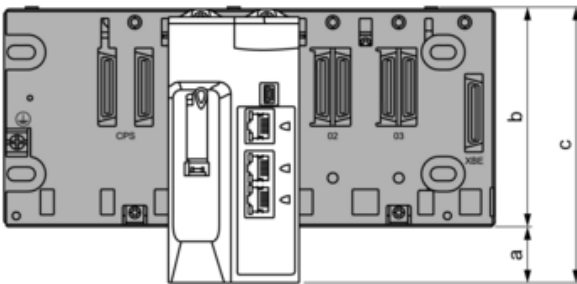
Offer Sustainability

Sustainable offer status	Green Premium product
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
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

CPU Module Only

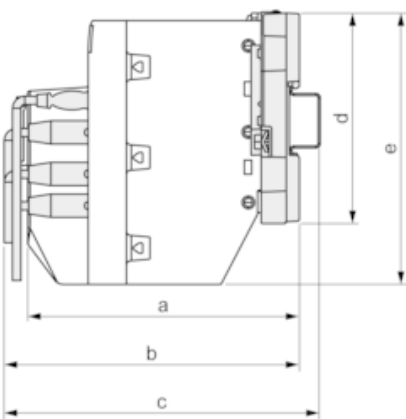


Modules Mounted on Racks



- 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.)