Product data sheet

Specifications

standalone processor, Modicon
M580, 8MB, 61 Ethernet devices, 8
remote IO racks of X80

BMEP582040

Main

Range of product	Modicon M580
Product or component type	Processor module

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	Serial link Counter Accurate time stamping HART Motion control SSI encoder
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 remote I/O station	8 - 2 rack(s) per remote drop
Number of distributed equipment	64
Communication module processor capacity	2 Ethernet communication module 16 AS-Interface module
Communication service	DIO scanner RIO scanner
Memory description	Expandable flash, 4 GB for data storage Integrated RAM, 10 kB for system memory Integrated RAM, 8 MB for program process Integrated RAM, 768 kB for data process Integrated RAM, 2 MB for program safety Integrated RAM, 512 KB for data safety
Application structure	64 event tasks 2 auxiliary tasks 1 cyclic/periodic master task 1 periodic fast task

Cybersecurity	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
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	15 gn
Ambient air temperature for operation	0…60 °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
Product certifications	CE
	UL
	CSA
	RCM
	EAC
	Merchant Navy
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	Safety
	Corrosion resistance
	Salt mist
	Dust resistant
	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)
	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	0.849 kg

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Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.200 cm
Package 1 Width	17.800 cm
Package 1 Length	25.200 cm
Package 1 Weight	874.000 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	5.634 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

Total lifecycle Carbon footprint	**244**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

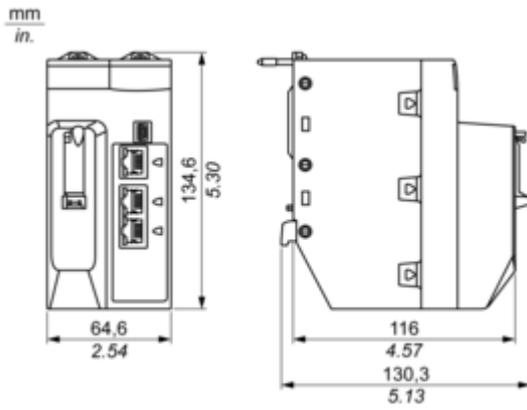|	
Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
SCIP Number	**4eb70ab0-978b-4773-a441-0cc20d6144a1**
REACh Regulation	**REACh Declaration**
California proposition 65	**WARNING: 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

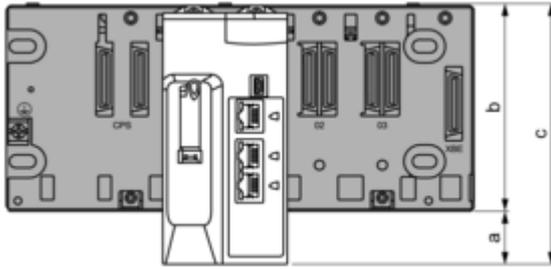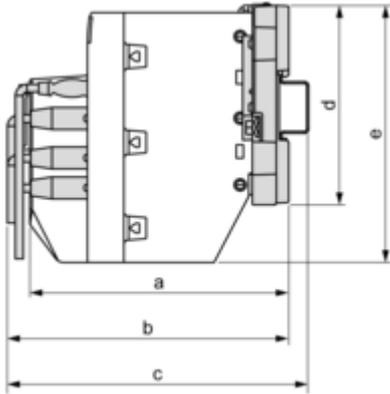|	
End of life manual availability	**End of Life Information**
Take-back	**No**

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.)

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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