



### Main

Range of product	Modicon M580
Product or component type	Processor module

### 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 SSI encoder Motion control Accurate time stamping HART Serial link
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	16 - 2 rack(s) per remote drop
Number of distributed equipment	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 for data storage Integrated RAM, 10 kB for system memory Integrated RAM, 16 MB for program Integrated RAM, 2048 kB for data
Application structure	2 auxiliary tasks 1 cyclic/periodic master task

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

	1 periodic fast task 128 event tasks
Number of instructions per ms	30 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 40 Kinst/ms 100 % Boolean
Current consumption	295 mA at 24 V DC
MTBF reliability	600000 H
Marking	CE

## Environment

Vibration resistance	3 gn
Shock resistance	30 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 2012/19/EU - WEEE directive
Product certifications	CE UL CSA RCM EAC Merchant Navy
Standards	EN 61131-2 EN/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	0.849 kg

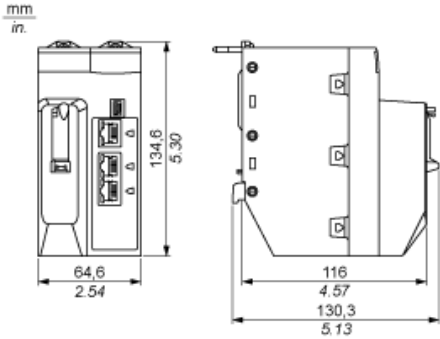
## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	895 g
Package 1 Height	9.5 cm
Package 1 width	18 cm
Package 1 Length	26 cm
Unit Type of Package 2	S03
Number of Units in Package 2	6
Package 2 Weight	5.63 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

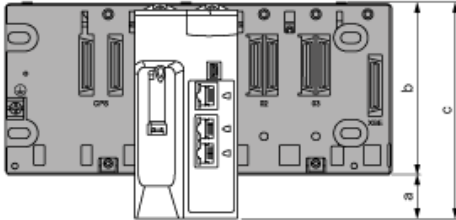
CPU Module Only



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Modules Mounted on Racks

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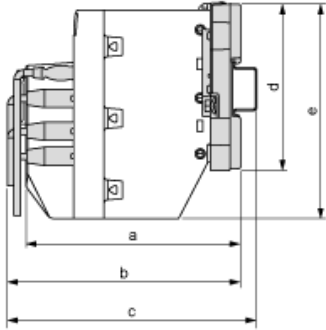


- a: additional space below the rack to accommodate the height of the CPU. For an X Bus rack, the value is 30.9 mm (1.217 in.); for an Ethernet rack, the value is 30.9 mm (1.217 in.).
- b: the height of the rack. For an X Bus rack, the height is 103.7 mm (4.083 in.); for an Ethernet rack, the height 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

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- 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.)