



# processor module M580 - Level 1 - Distributed

BMEP581020

#### Main

| Range Of Product          | Modicon M580     |
|---------------------------|------------------|
| Product Or Component Type | Processor module |

## Complementary

| •   |   |
|---|---|
| Number Of Racks                                     | 4                                       |
| Local I/O Processor Capacity (Discrete)             | 1024 I/O                                |
| Local I/O Processor Capacity (Analog)               | 256 I/O                                 |
| Number Of Application Specific Channel (Local Rack) | 36                                      |
| Application Specific I/O                            | Accurate time stamping                  |
|   | Motion control                          |
|   | Counter                                 |
|   | HART                                    |
|   | SSI encoder                             |
|   | 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 Distributed<br>Equipment                  | 64                                      |
| Communication Module                                | 2 Ethernet communication module         |
| Processor Capacity                                  | 8 AS-Interface module                   |
| Communication Service                               | DIO scanner                             |
| Memory Description                                  | Integrated RAM, 4 MB for program        |
|   | Integrated RAM, 384 kB for data         |
|   | Expandable flash, 4 GB for data storage |
|   | Integrated RAM, 10 kB for system memory |
| Application Structure                               | 1 periodic fast task                    |
|   | 2 auxiliary tasks                       |
|   | 1 cyclic/periodic master task           |
|   | 64 event tasks                          |

| Cybersecurity  Number Of Instructions Per Ms | Achilles certified DoS prevention IPSec SNMP logging Syslog protocol support Transport layer security Audit trail Embedded firewall Firmware signature Password protection Port hardening Secure communiction (HTTPS) Security log  7.5 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 10 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<br>Operation     | 060 °C  |
| Ambient Air Temperature For Storage          | -4085 °C  |
| Operating Altitude                           | 02000 m<br>20005000 m with derating factor  |
| Relative Humidity                            | 595 % at 55 °C without condensation   |
| Ip Degree Of Protection                      | IP20  |
| Directives                                   | 2014/35/EU - low voltage directive<br>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                 | 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

| Package 1 Height             | 9.000 cm  |
|------------------------------|-----------|
| Package 1 Width              | 17.800 cm |
| Package 1 Length             | 25.200 cm |
| Package 1 Weight             | 871.000 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             | 5.660 kg  |

## Sustainability Screen Premium

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

### Well-being performance



Mercury Free



Rohs Exemption Information

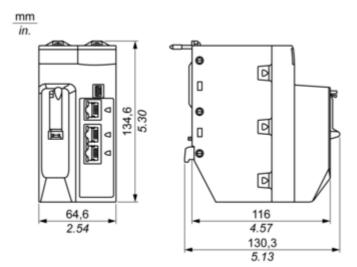
Yes

#### **Certifications & Standards**

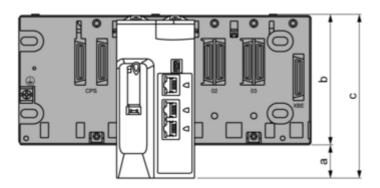
| Reach Regulation         | REACh Declaration   |
|--------------------------|---|
| Eu Rohs Directive        | Pro-active compliance (Product out of EU RoHS legal scope)  |
| China Rohs Regulation    | China RoHS declaration  |
| Environmental Disclosure | Product Environmental Profile   |
| Weee                     | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| Circularity Profile      | End of Life Information   |

#### **Dimensions Drawings**

#### **CPU Module Only**



#### **Modules Mounted on Racks**

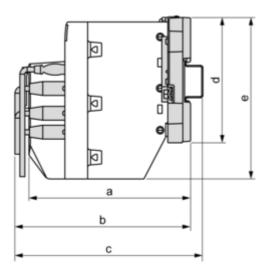


a: additional space below the rack to accommodate the height of the CPU. For an X Bus rack, the value is 30.9 mm (1.217 in.); for an Ethernet rack, the value is 29.49 mm (1.161 in.).

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.)