Product data sheet
Characteristics

BMEP581020
standalone processor, Modicon M580, 4MB, 61 Ethernet devices, 4 local IO racks of 1024 digital, 256 analog



Main

Range of product	Modicon M580
Product or component type	Processor module

Complementary

Number of racks	4
Discrete I/O processor capacity	1024 I/O
Analogue I/O processor capacity	256 I/O
Number of application specific channel	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 equipment	64
Communication module processor capacity	2 Ethernet communication module 2 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	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 RBAC user management PKI digital certificate authentication Modbus TLS (Modbus Secure Explicit) Centralised certificate management NIS2.0 compliance EU CRA compliance
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	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[RETURN]UL[RETURN]CSA[RETURN]RCM[RETURN]EAC[RETURN]Merchant Navy[RETURN
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	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 Cm
Package 2 Width	30 Cm

Package 2 Length	40 Cm
Package 2 Weight	5.660 Kg
Unit Type of Package 3	P06
Number of Units in Package 3	48
Package 3 Height	75.000 Cm
Package 3 Width	60.000 Cm
Package 3 Length	80.000 Cm
Package 3 Weight	55.280 Kg

Offer Sustainability

Total lifecycle Carbon footprint	230 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	63.748943662
Carbon footprint of the manufacturing phase [A1 to A3]	64 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1122524648
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0031800951
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	165.5145762712
Carbon footprint of the use phase [B2, B3, B4, B6]	166 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.3674728873
Carbon footprint of the end-of-life phase [C1 to C4]	0.4 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	230
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	4eb70ab0-978b-4773-a441-0cc20d6144a1
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
End of life manual availability	End Of Life Information
Take-back	No

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised