



## Main

Range of product	Modicon M580
Product or component type	Processor module

## Complementary

Number of racks	4
Discrete I/O processor capacity	2048 I/O
Analogue I/O processor capacity	512 I/O
Number of application specific channel	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[RETURN]UL[RETURN]CSA[RETURN]RCM[RETURN]EAC[RETURN]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)
Product weight	0.849 Kg

## 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

### Offer Sustainability

Recyclability potential, in %	68
Total lifecycle Carbon footprint	244 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	62.43
Carbon footprint of the manufacturing phase [A1 to A3]	62 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.10993
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0031143
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	180.84
Carbon footprint of the use phase [B2, B3, B4, B6]	181 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	0.35987
Carbon footprint of the end-of-life phase [C1 to C4]	0.4 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Total lifecycle Carbon footprint	244
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 <a href="#">↗</a>
EU RoHS Directive	Compliant By Exemption <a href="#">↗</a>
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
End of life manual availability	<a href="#">End Of Life Information</a>
Take-back	No

### Contractual warranty

Warranty (in months)	18
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Product Life Status : **Commercialised**