

Product data sheet

Specifications



processor, Modicon M340, max 1024 discrete, 256 analog IO, CANopen, Ethernet, for severe environment

BMXP3420302H

Main

Range of product	Modicon M340 automation platform
Product or component type	Processor module
Product specific application	For severe environments
Concept	CANopen Transparent Ready
Number of racks	4
Local I/O processor capacity (discrete)	1024 I/O
Analogue I/O processor capacity	256 I/O
Number of application specific channel	36

Complementary

Control channels	Programmable loops
Motion control	Independent axis CANopen
Integrated connection type	USB port at 12 Mbit/s CANopen master bus SUB-D 9, transmission mode: 2 twisted shielded pairs at 20 kbit/s...1 Mbit/s Ethernet TCP/IP RJ45, transmission mode: 1 twisted pair at 10/100 Mbit/s
Communication module processor capacity	2 Ethernet communication module 4 AS-Interface module
embedded communication service	Network management (NMT) CANopen Process Data Object (PDO) CANopen Service Data Object (SDO) CANopen Special functions (SYNC, EMCY, TIME) CANopen Bandwidth management, Ethernet TCP/IP Data Editor, Ethernet TCP/IP Modbus TCP messaging, Ethernet TCP/IP Rack Viewer, Ethernet TCP/IP SNMP network administrator, Ethernet TCP/IP
Port Ethernet	10BASE-T/100BASE-TX
Transmission rate	1 Mbit/s 0...20 m 0...0.6 m 125 kbit/s 0...500 m 0...10 m 20 kbit/s 0...2500 m 0...300 m 250 kbit/s 0...250 m 0...10 m 50 kbit/s 0...1000 m 0...120 m 500 kbit/s 0...100 m 0...10 m 800 kbit/s 0...40 m 0...6 m
Bus type	CANopen M20 DS 301 V4.02 devices linked by daisy-chaining or tap junctions CSMA/CA CANopen M20 DS 303-2 devices linked by daisy-chaining or tap junctions CSMA/CA CANopen M20 DS 405 devices linked by daisy-chaining or tap junctions CSMA/CA
Number of server device(s)	63 CANopen

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

Number of devices per segment	0...16 for <205 m (CANopen) 0...32 for <185 m (CANopen) 0...64 for <160 m (CANopen)
Memory description	Supplied memory card (BMXRMS008MP) backup of programs, constants, symbols and data Internal RAM 4096 kB Internal RAM 256 kB data Internal RAM 3584 kB program constants and symbols Supplied memory card (BMXRMS008MP) activation of standard web server, class B10
Maximum size of object areas	32634 %Mi located internal bits 32464 %MWi internal words 32760 %KWi constant words
Default size of object areas	1024 %MWi internal words located internal data 256 %KWi constant words located internal data 512 %Mi located internal bits
Application structure	1 periodic fast task No auxiliary task 1 cyclic/periodic master task 64 event tasks
Execution time per instruction	0.12 µs Boolean 0.17 µs double-length words 0.25 µs single-length words 1.16 µs floating points
Number of instructions per ms	6.4 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 8.1 Kinst/ms 100 % Boolean
System overhead	0.13 ms for fast task 0.7 ms for master task
Current consumption	135 mA at 24 V DC
Supply	Internal power supply via rack
Marking	CE UL CSA RCM EAC China RoHS WEEE IEC ATEX
Status LED	1 LED (green) activity on Ethernet network (ETH ACT) 1 LED (green) integrated machine/installation bus operational (CAN RUN) 1 LED (green) processor running (RUN) 1 LED (green) status of Ethernet network (ETH STS) 1 LED (green) data rate (ETH 100) 1 LED (red) I/O module fault (I/O) 1 LED (red) integrated machine/installation bus fault (CAN ERR) 1 LED (red) memory card fault (CARD ERR) 1 LED (red) processor or system fault (ERR)
Product weight	0.215 kg

Environment

Ambient air temperature for operation	-25...70 °C
Relative humidity	5...95 % without condensation
IP degree of protection	IP20
Protective treatment	Conformal coating
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility 2012/19/EU - WEEE directive 2014/34/EU - ATEX directive

Product certifications	CE UL CSA RCM EAC UKCA Merchant Navy ATEX zone 2/22 IEC-Ex zone 2/22 UKEX zone 2/22 CCSAus HazLoc Class I Division 2 Group A CCSAus HazLoc Class I Division 2 Group B CCSAus HazLoc Class I Division 2 Group C CCSAus HazLoc Class I Division 2 Group D
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 IEC 60079-0
Environmental characteristic	Gas resistant class Gx conforming to ISA S71.04 Gas resistant class 3C4 conforming to IEC 60721-3-3 Dust resistant class 3S4 conforming to IEC 60721-3-3 Sand resistant class 3S4 conforming to IEC 60721-3-3 Salt resistant Kb/2 conforming to IEC 60068-2-52 Mold growth resistant class 3B2 conforming to IEC 60721-3-3 Fungal spore resistant class 3B2 conforming to IEC 60721-3-3

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.500 cm
Package 1 Width	11.000 cm
Package 1 Length	12.000 cm
Package 1 Weight	259.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.245 kg

Contractual warranty

Warranty (in months)	18
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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	162 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	18 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	144 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.4 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again



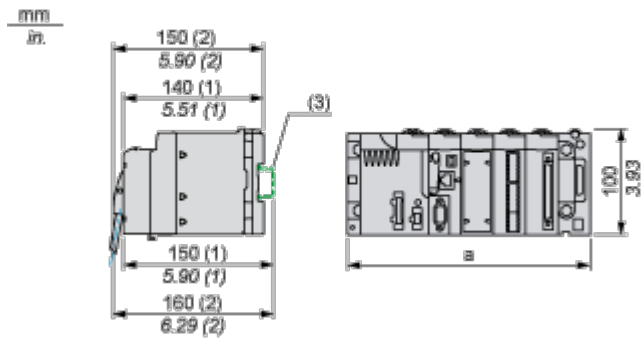
Repack and remanufacture

Recyclability potential, in %	32
End of life manual availability	End of Life Information
Take-back	No

Dimensions Drawings

Modules Mounted on Racks

Dimensions



- (1) With removable terminal block (cage, screw or spring).
- (2) With FCN connector.
- (3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Image of product / Alternate images

Alternative

