Product data sheet

Specifications



processor, Modicon M340, max 1024 discrete, 256 analog IO, Modbus, CANopen

BMXP3420102

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range of Product	Modicon M340 automation platform
Product or Component Type	Processor module
Concept	Modbus CANopen
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
Monitoring	Diagnostic counters Modbus Event counters Modbus

Complementary

Control channels	Programmable loops
Motion control	Independent axis CANopen
Integrated connection type	Non isolated serial link RJ45 character mode asynchronous in baseband, RS232C 2 twisted shielded pairs 0.3...19.2 kbit/s full duplex Non isolated serial link RJ45 character mode asynchronous in baseband, RS485 1 twisted shielded pair 0.3...19.2 kbit/s half duplex Non isolated serial link RJ45, master/slave Modbus, RTU/ASCII asynchronous in baseband, RS232C 1 twisted shielded pair 0.3...19.2 kbit/s half duplex Non isolated serial link RJ45, master/slave Modbus, RTU/ASCII asynchronous in baseband, RS485 1 twisted shielded pair 0.3...19.2 kbit/s half duplex USB port 12 Mbit/s CANopen master bus SUB-D 9 2 twisted shielded pairs 20 kbit/s...1 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
Transmission rate	1 Mbit/s 0…65.6 ft (0…20 m) 0…2.0 ft (0…0.6 m) 125 kbit/s 0…1640.4 ft (0…500 m) 0…32.8 ft (0…10 m) 20 kbit/s 0…8202.10 ft (0…2500 m) 0…984.3 ft (0…300 m) 250 kbit/s 0…820.2 ft (0…250 m) 0…32.8 ft (0…10 m) 50 kbit/s 0…3280.8 ft (0…1000 m) 0…393.7 ft (0…120 m) 500 kbit/s 0…328.08 ft (0…100 m) 0…32.8 ft (0…10 m) 800 kbit/s 0…131.2 ft (0…40 m) 0…19.7 ft (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

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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…32character mode) 0…32Modbus) 0…16 672.6 ft (205 m) CANopen) 0…32 607.0 ft (185 m) CANopen) 0…64 524.9 ft (160 m) CANopen)
Number of devices	2 point-to-point character mode 2 point-to-point Modbus
Bus length	0…32.8 ft (0…10 m) serial link non isolated character mode segment 0…32.8 ft (0…10 m) serial link non isolated Modbus segment 0…3280.8 ft (0…1000 m) serial link isolated character mode segment 0…3280.8 ft (0…1000 m) serial link isolated Modbus segment 0…49.2 ft (0…15 m) character mode point-to-point 0…49.2 ft (0…15 m) Modbus point-to-point
Maximum tap links length	<49.2 ft (15 m) serial link non isolated character mode segment <49.2 ft (15 m) serial link non isolated Modbus segment <131.2 ft (40 m) serial link isolated character mode segment <131.2 ft (40 m) serial link isolated Modbus segment
Number of addresses	0…248 character mode 0…248 Modbus
Requests	1 K data bytes per request character mode 252 data bytes per RTU request Modbus 504 data bytes per ASCII request Modbus
Control parameter	One CRC on each frame (RTU) Modbus One LRC on each frame (ASCII) character mode One LRC on each frame (ASCII) Modbus
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
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	No auxiliary task 1 cyclic/periodic master task 1 periodic fast 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 fast task 0.7 ms master task
Current consumption	90 mA 24 V DC
Supply	Internal power supply via rack
Marking	CE UL CSA RCM EAC UKCA China RoHS WEEE IEC

Status LED	1 LED (Green) integrated machine/installation bus operational (CAN RUN) 1 LED (Green) processor running (RUN) 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) 1 LED (Yellow) activity on Modbus (SER COM)
Product Weight	0.46 lb(US) (0.21 kg)

Environment

Ambient Air Temperature for Operation	32…140 °F (0…60 °C)
Relative Humidity	5…95 % without condensation
IP Degree of Protection	IP20
Protective treatment	TC
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility 2012/19/EU - WEEE directive
Product certifications	CE UL CSA RCM EAC UKCA Merchant Navy 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

Ordering and shipping details

Category	US1PC3418160
Discount Schedule	PC34
GTIN	3595864024448
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.126 in (5.400 cm)
Package 1 Width	4.528 in (11.500 cm)
Package 1 Length	4.882 in (12.400 cm)
Package weight(Lbs)	8.783 oz (249.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	5.906 in (15.000 cm)

Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	8.946 lb(US) (4.058 kg)

Contractual warranty

Warranty (in months)	18

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	**114 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**17 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]	**96 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
California proposition 65	**WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**

Use Longer

Lifetime extension

Repair	**No**

Use Again

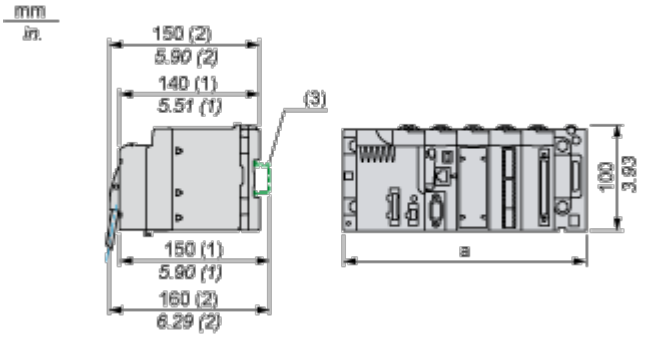
Repack and remanufacture

Recyclability potential, in %	**32**
Circularity Profile	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.

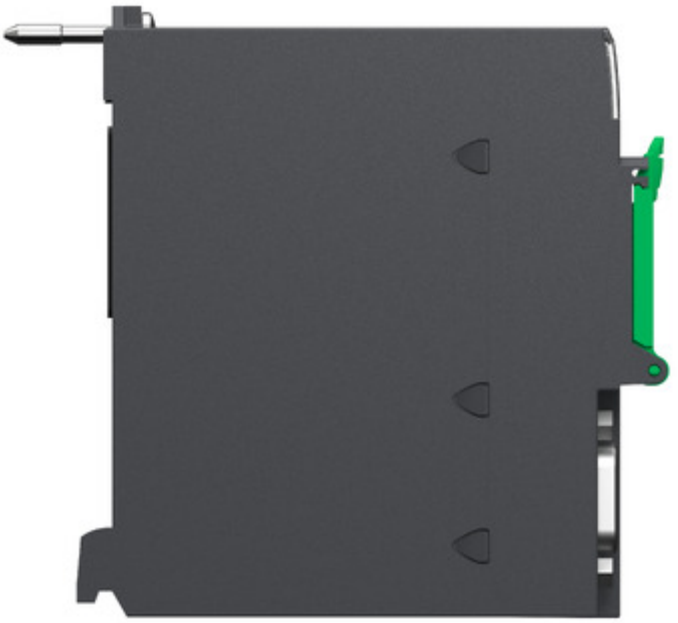
Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Image of product / Alternate images

Alternative








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Modicon
BMXP3420102
CPU340-20 MODBUS
CANOPEN2
DOM : XXXX



