

# Product data sheet

Specifications



Processor, Modicon M340, max  
1024 discrete + 256 analog I/O,  
Modbus, CANopen, without memory  
card

BMXP3420102CL

## Main

Range Of Product	Modicon M340 automation platform
Product Or Component Type	Processor module
Condition Of Use	Requires a memory card to work (not supplied)
Number Of Racks	4
Number Of Slots	11
Discrete I/O Processor Capacity	1024 I/O multi-rack configuration 704 I/O single-rack configuration
Analogue I/O Processor Capacity	256 I/O multi-rack configuration 66 I/O single-rack configuration
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, transmission mode: asynchronous in baseband, RS232C, transmission mode: 2 twisted shielded pairs at 0.3...19.2 kbit/s full duplex Non isolated serial link RJ45 character mode, transmission mode: asynchronous in baseband, RS485, transmission mode: 1 twisted shielded pair at 0.3...19.2 kbit/s half duplex Non isolated serial link RJ45, master/slave Modbus, RTU/ASCII, transmission mode: asynchronous in baseband, RS232C, transmission mode: 1 twisted shielded pair at 0.3...19.2 kbit/s half duplex Non isolated serial link RJ45, master/slave Modbus, RTU/ASCII, transmission mode: asynchronous in baseband, RS485, transmission mode: 1 twisted shielded pair at 0.3...19.2 kbit/s half duplex 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
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...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

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

<b>Bus Type</b>	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
<b>Number Of Server Device(S)</b>	63 CANopen
<b>Number Of Devices Per Segment</b>	0...32 (character mode) 0...32 (Modbus) 0...16 for <205 m (CANopen) 0...32 for <185 m (CANopen) 0...64 for <160 m (CANopen)
<b>Number Of Devices</b>	2 point-to-point character mode 2 point-to-point Modbus
<b>Bus Length</b>	0...10 m serial link non isolated character mode segment 0...10 m serial link non isolated Modbus segment 0...1000 m serial link isolated character mode segment 0...1000 m serial link isolated Modbus segment 0...15 m character mode point-to-point 0...15 m Modbus point-to-point
<b>Maximum Tap Links Length</b>	<15 m serial link non isolated character mode segment <15 m serial link non isolated Modbus segment <40 m serial link isolated character mode segment <40 m serial link isolated Modbus segment
<b>Number Of Addresses</b>	0...248 for character mode 0...248 for Modbus
<b>Requests</b>	1 K data bytes per request character mode 252 data bytes per RTU request Modbus 504 data bytes per ASCII request Modbus
<b>Control Parameter</b>	One CRC on each frame (RTU) Modbus One LRC on each frame (ASCII) character mode One LRC on each frame (ASCII) Modbus
<b>Memory Description</b>	Internal RAM 4096 kB Internal RAM 256 kB data Internal RAM 3584 kB program constants and symbols
<b>Maximum Size Of Object Areas</b>	256 kB unlocated internal data 32634 %Mi located internal bits
<b>Default Size Of Object Areas</b>	1024 %MWi internal words located internal data 256 %KWi constant words located internal data 512 %Mi located internal bits
<b>Application Structure</b>	64 event tasks No auxiliary task 1 cyclic/periodic master task 1 periodic fast task
<b>Execution Time Per Instruction</b>	0.12 µs Boolean 0.17 µs double-length words 0.25 µs single-length words 1.16 µs floating points
<b>Number Of Instructions Per Ms</b>	6.4 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 8.1 Kinst/ms 100 % Boolean
<b>System Overhead</b>	0.13 ms for fast task 0.7 ms for master task
<b>Current Consumption</b>	90 mA at 24 V DC
<b>Supply</b>	Internal power supply via rack
<b>Marking</b>	CE
<b>Status Led</b>	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)

Net Weight	0.21 kg
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## Environment

Ambient Air Temperature For Operation	0...60 °C
Relative Humidity	10...95 % without condensation
Ip Degree Of Protection	IP20
Protective Treatment	TC
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility
Product Certifications	CE UL CSA RCM EAC Merchant Navy
Standards	EN 61131-2 EN/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

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.5 cm
Package 1 Width	11.0 cm
Package 1 Length	12.0 cm
Package 1 Weight	252.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	15
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.581 kg

# Sustainability

**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class 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 >](#)

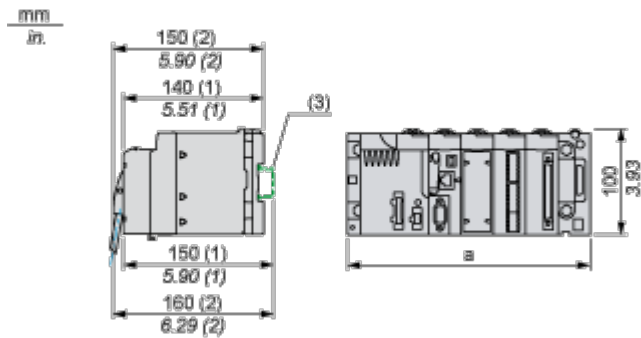
## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
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 <a href="#">www.P65Warnings.ca.gov</a>

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