Product data sheet
Characteristics

BMXP3420102

Processor module, Modicon M340 automation platform, max 1024 discrete + 256 analog I/O

Green Premium

Main

Range of product	Modicon M340 automation platform
Product or component type	Processor module
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
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 slave	63 CANopen
Number of devices per segment	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)

Number of devices	2 point-to-point character mode 2 point-to-point Modbus
Bus length	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
Maximum tap links length	<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
Number of addresses	0…248 for character mode 0…248 for 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	256 kB unlocated internal data 32634 %Mi located internal bits
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 for fast task 0.7 ms for master task
Current consumption	90 mA at 24 V DC
Supply	Internal power supply via rack
Marking	CE
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)
Net weight	0.21 kg

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

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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 Weight	252 g
Package 1 Height	5.5 cm
Package 1 width	11 cm
Package 1 Length	11.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	4.206 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

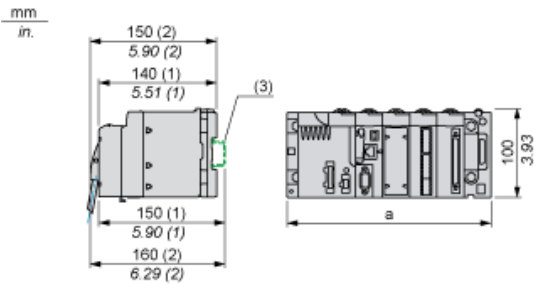## Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

Warranty	18 months

BMXP3420102

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

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