Product data sheet
Characteristics

BMXP342020
processor module M340 - max 1024 discrete + 256 analog I/O - Modbus - Ethernet



Main

Range of product	Modicon M340 automation platform
Product or component type	Processor module
Concept	CANopen Transparent Ready
Number of racks	4
Number of slots	11
Discrete I/O processor capacity	704 I/O single-rack configuration 1024 I/O multi-rack configuration
Analogue I/O processor capacity	66 I/O single-rack configuration 256 I/O multi-rack configuration
Number of application specific channel	36
Monitoring	Event counters Modbus Diagnostic counters Modbus

Complementary

Control channels	Programmable loops
Integrated connection type	USB port 12 Mbit/s Non isolated serial link RJ45 Modbus master/slave RTU/ASCII asynchronous in baseband RS485 half duplex 0.3...19.2 kbit/s 1 twisted shielded pair Non isolated serial link RJ45 Modbus master/slave RTU/ASCII asynchronous in baseband RS232C half duplex 0.3...19.2 kbit/s 1 twisted shielded pair Non isolated serial link RJ45 character mode asynchronous in baseband RS485 half duplex 0.3...19.2 kbit/s 1 twisted shielded pair Non isolated serial link RJ45 character mode asynchronous in baseband RS232C full duplex 0.3...19.2 kbit/s 2 twisted shielded pairs Ethernet TCP/IP RJ45 10/100 Mbit/s 1 twisted pair
Communication module processor	4 AS-Interface module 2 Ethernet communication module
Embedded communication service	SNMP network administrator, Ethernet TCP/IP Rack Viewer, Ethernet TCP/IP Modbus TCP messaging, Ethernet TCP/IP Data Editor, Ethernet TCP/IP Bandwidth management, Ethernet TCP/IP
Port Ethernet	10BASE-T/100BASE-TX
Number of devices per segment	0...32 Modbus 0...32 character mode
Number of devices	2 point-to-point Modbus 2 point-to-point character mode
Bus length	0...15 m Modbus point-to-point 0...15 m character mode point-to-point 0...1000 m serial link isolated Modbus segment 0...1000 m serial link isolated character mode segment 0...10 m serial link non isolated Modbus segment 0...10 m serial link non isolated character mode segment
Tap links length	0...40 m serial link isolated Modbus segment 0...40 m serial link isolated character mode segment 0...15 m serial link non isolated Modbus segment 0...15 m serial link non isolated character mode segment
Number of addresses	0...248 Modbus 0...248 character mode
Requests	504 data bytes per ASCII request Modbus 252 data bytes per RTU request Modbus 1 K data bytes per request character mode

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
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.
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Control parameter	One LRC on each frame (ASCII) Modbus One LRC on each frame (ASCII) character mode One CRC on each frame (RTU) Modbus
Memory description	Supplied memory card (BMXRMS008MP) for activation of standard web server, class B10 3584 kB internal RAM for program constants and symbols 256 kB internal RAM for data 4096 kB internal RAM Supplied memory card (BMXRMS008MP) for backup of programs, constants, symbols and data
Maximum size of object areas	32634 %Mi located internal bits 256 kB unlocated internal data
Default size of object areas	512 %Mi located internal bits 256 %KWi constant words located internal data 1024 %MWi internal words located internal data
Application structure	1 cyclic/periodic master task 1 periodic fast task 64 event tasks No auxiliary task
Execution time per instruction	1.16 µs floating points 0.25 µs single-length words 0.17 µs double-length words 0.12 µs Boolean
Number of instructions per ms	8.1 Kinst/ms 100 % Boolean 6.4 Kinst/ms 65 % Boolean + 35 % fixed arithmetic
System overhead	0.7 ms master task 0.13 ms fast task
Current consumption	95 mA 24 V DC
Supply	Internal power supply via rack
Marking	CE
Status LED	1 LED yellow activity on Modbus (SER COM) 1 LED red processor or system fault (ERR) 1 LED red memory card fault (CARD ERR) 1 LED red I/O module fault (I/O) 1 LED red data rate (ETH 100) 1 LED green status of Ethernet network (ETH STS) 1 LED green processor running (RUN) 1 LED green activity on Ethernet network (ETH ACT)
Product weight	0.205 kg

Environment

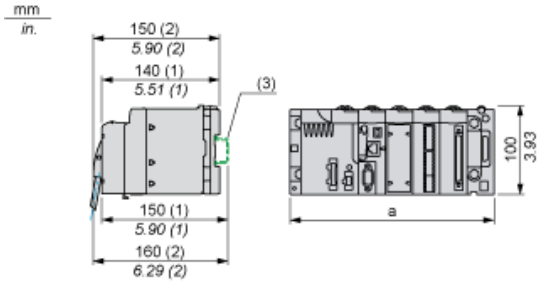
Ambient air temperature for operation	0...60 °C
Relative humidity	10...95 % without condensation
IP degree of protection	IP20
Protective treatment	TC
Standards	CSA C22.2 No 142 EN 61131-2 IEC 61131-2 UL 508 CSA C22.2 No 213 Class I Division 2

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0722 - Schneider Electric declaration of conformity
REACh	Reference contains SVHC above the threshold - go to CaP for more details
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Need no specific recycling operations

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