



Main

Range of product	Modicon M340 automation platform
Product or component type	Processor module
Concept	CANopen Modbus
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	CANopen master bus SUB-D 9 20 kbit/s...1 Mbit/s 2 twisted shielded pairs Non isolated serial link RJ45 character mode asynchronous in baseband RS232C full duplex 0.3...19.2 kbit/s 2 twisted shielded pairs 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 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 Modbus master/slave RTU/ASCII asynchronous in baseband RS485 half duplex 0.3...19.2 kbit/s 1 twisted shielded pair USB port 12 Mbit/s
Communication module processor	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	0...63 CANopen
Number of devices per segment	0...16 0...205 m CANopen 0...32 0...185 m CANopen 0...32 character mode 0...32 Modbus 0...64 0...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
Tap links length	0...15 m serial link non isolated character mode segment 0...15 m serial link non isolated Modbus segment 0...40 m serial link isolated character mode segment 0...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) for backup of programs, constants, symbols and data 4096 kB internal RAM 256 kB internal RAM for data 3584 kB internal RAM for 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 %KW constant words located internal data 512 %Mi located internal bits
Application structure	1 cyclic/periodic master task 1 periodic fast task 64 event tasks No auxiliary task
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
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	0.21 kg

Environment

Ambient air temperature for operation	0...60 °C
Relative humidity	10...95 % without condensation
IP degree of protection	IP20
Protective treatment	TC
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 (date code: YYWW)	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

Contractual warranty

Warranty period	18 months
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