

Product data sheet

Specifications



Unity processor Modicon Quantum - 1056 kB - 66 MHz - coated

140CPU43412UC

⚠ Discontinued on: Dec 31, 2018

⚠ To be end-of-service on: Dec 31, 2026

⚠ Discontinued - Service only

Main

Range Of ProductModicon Quantum automation platform

Product Or Component TypeUnity processor

Complementary

Clock Frequency66 MHz

Number Of Slots
16
6
4
10
2

Number Of Racks2 - local rack(s)

Number Of Distributed I/O Station63 station(s) - 1 rack(s) - 3 Modbus Plus network(s)

Number Of Remote I/O Station
31 - 2 rack(s) per S908 remote I/O
0 - 0 rack(s) per ethernet remote I/O

Discrete I/O Number
31744 inputs, 31744 outputs - remote
8000 inputs, 8000 outputs - distributed - per network Modbus Plus
Unlimited (26 slots max) - local

Analogue I/O Number
500 inputs, 500 outputs - distributed - per network Modbus Plus
1984 inputs, 1984 outputs - S908 remote I/O
Unlimited (26 slots max) - local

Application Specific I/O
High-speed interrupt inputs
Counter
Accurate time stamping
Serial link

Number Of Optional Modules6 (Ethernet, Modbus, Modbus Plus, Profibus DP, Sy/Max)

Maximum Number Of Connections
2 AS-Interface - distributed
2 Modbus (RS232/485 Modbus/ASCII)
4 AS-Interface - remote
6 Ethernet TCP/IP - local
6 Modbus Plus - local
6 Profibus DP - local

Integrated Connection Type
1 Modbus Plus with
2 Modbus with

ChecksProcess control

Memory DescriptionInternal RAM 1056 kB

Switch Function
Slide switch communication port : ASCII/RTU/Memory
Key switch memory start/stop memory protection

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

Application Structure	1 cyclic/periodic master task - 1 periodic fast task - 16 timer interrupt tasks - 64 I/O interrupt tasks - 64 interrupt tasks - No auxiliary task -
Execution Time Per Instruction	0.1...0.27 µs floating points 0.1...0.27 µs on fixed-point arithmetic 0.12...0.585 µs Boolean 0.12...0.585 µs on word
Number Of Instructions Per Ms	1.86 Kinst/ms 100 % Boolean 2.49 Kinst/ms 65 % Boolean and 35 % numerical
System Overhead	0.2 ms for fast task 1 ms for master task
Bus Current Requirement	1800 mA
Local Signalling	1 LED (green) for communications are active on the Modbus Plus port (Modbus Plus) 1 LED (green) for communications are active on the Modbus port (Modbus) 1 LED (green) for CPU has been started and is solving logic (RUN) 1 LED (green) for CPU has passed the power-up diagnostic tests (READY) 1 LED (orange) for write-protected memory (memory port) 1 LED (red) for battery needs replacing or is not present (BAT LOW) 1 LED (red) for communications error on the Modbus Plus port (ERROR A)
Electrical Connection	1 female connector, connector type: SUB-D 9 for connecting to the Modbus Plus network 2 female connectors, connector type: SUB-D 9 for connecting to the Modbus bus

Environment

Protective Treatment	Conformal coating Humiseal 1A33
Product Certifications	CSA CE UL Misc (Marine) GOST
Standards	HazLoc

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	5.0 cm
Package 1 Width	16.5 cm
Package 1 Length	31.5 cm
Package 1 Weight	635.0 g

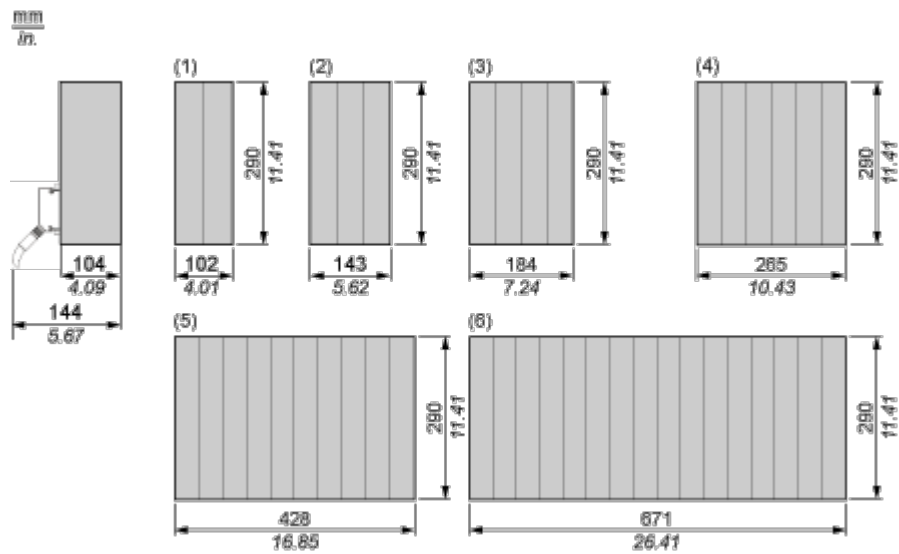
Contractual warranty

Warranty	18 months
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Dimensions Drawings

Racks for Modules Mounting

Dimensions of Modules and Racks



- (1) 2 slots
- (2) 3 slots
- (3) 4 slots
- (4) 6 slots
- (5) 10 slots
- (6) 16 slots