

Product datasheet

Specifications



Unity processor, Modicon Quantum automation platform, Modbus Plus, 548kB RAM, 66MHz

140CPU31110

⚠ Discontinued - Service only

⚠ To be discontinued on: 31-Dec-2026

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

Main

Range Of Product	Modicon Quantum automation platform
Product Or Component Type	Unity processor

Complementary

Clock Frequency	66 MHz
Number Of Slots	16 4 10 2 6
Number Of Racks	2 - local rack(s)
Number Of Distributed I/O Station	63 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	Unlimited (27 slots max) - local 31744 inputs, 31744 outputs - remote 8000 inputs, 8000 outputs - distributed - per network Modbus Plus
Analogue I/O Number	Unlimited (27 slots max) - local 500 inputs, 500 outputs - distributed - per network Modbus Plus 1984 inputs,1984 outputs - S908 remote I/O
Application Specific I/O	High-speed interrupt inputs Counter Accurate time stamping Serial link
Number Of Optional Modules	2 (Ethernet, Modbus, Modbus Plus, Profibus DP, Sy/Max)
Maximum Number Of Connections	1 USB 2 AS-Interface - distributed 2 Ethernet TCP/IP - local 2 Modbus Plus - local 2 Modbus (RS232/485 Modbus/ASCII) 2 Profibus DP - local 4 AS-Interface - remote
Integrated Connection Type	1 Modbus Plus with 2 Modbus with
Checks	Process control
Memory Description	Internal RAM 548 kB
Switch Function	Slide switch communication port : ASCII/RTU/Memory Slide switch memory port/off

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

Product Certifications	CSA CE UL
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	17.0 cm
Package 1 Length	31.0 cm
Package 1 Weight	720.0 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	7
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.97 kg

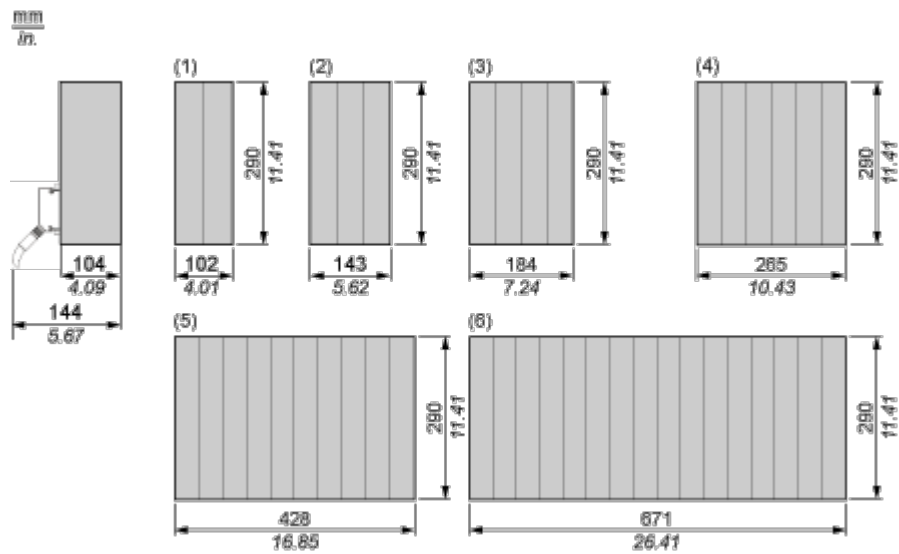
Contractual warranty

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