Product datasheet

Specifications

Unity processor Modicon Quantum - 548 kB - 66 MHz - coated

140CPU31110C

Discontinued on: Dec 31, 2018 AD

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

Discontinued - Service only

Main

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

Complementary

Clock Frequency	66 MHz
Number Of Slots	2 16 6 10 4
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	Counter Accurate time stamping Serial link High-speed interrupt inputs
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

Protective Treatment	Conformal coating Humiseal 1A33
Product Certifications	CE UL CSA
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	732.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	2
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.89 kg

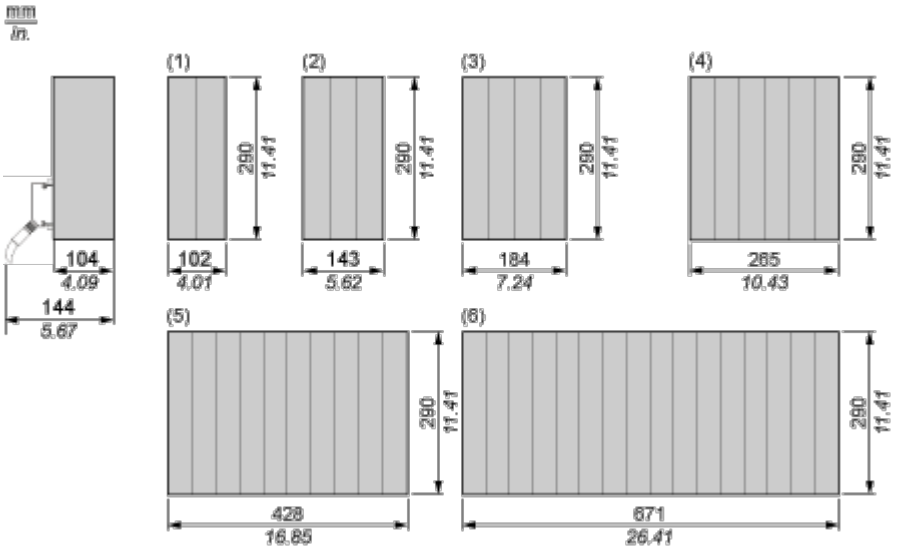
Contractual warranty

Warranty	18 months

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