

Schneider Series Service Manual

140CPU11302C

1. Description

The Modicon Quantum 140CPU11302C processor from Schneider Electric is designed for precise automation applications. Operating at a clock speed of 20 MHz, this processor includes 109 kB of internal RAM and processes instructions with a time range of 0.3 to 1.4 milliseconds per 1K instruction (LL984).

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Processor
Product	Line Modicon Quantum
Part	Number 140CPU11302C
EAN	3595861135703
Clock	Speed 20 MHz
Internal	RAM 109 kB
Processing	Time 0.3-1.4 ms per 1K instruction (LL984)
Watchdog	Timer 250 ms
I/O	Capacity (Local) Max 64 inputs / 64 outputs
I/O	Capacity (Distributed) 30 in / 32 out per module, up to 500 in / 500 out network-wide
Network	Communication Supports up to 3 distributed and 2 remote networks
Communication	Ports 1 Modbus RS232, 1 Modbus Plus
Battery	Type Lithium, 1.2 Ah capacity
Battery	Life 10 years
Power	Consumption 780 mA bus current requirement
Environmental	Ratings 32-140°F (0-60°C) operation, 95% RH (non-condensing)

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Technical specifications for 140CPU11302C

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Battery Life 10 years

Power Consumption 780 mA bus current requirement

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Description

The 140CPU11302C processor from Schneider Electric's Modicon Quantum series represents an advanced solution for industrial automation. With a clock speed set at 20 MHz, it ensures efficient performance across various control applications. This processor harnesses 109 kB of internal RAM and boasts a responsive processing time that ranges from 0.3 ms to 1.4 ms per 1K instruction (LL984).

In terms of input and output capabilities, the processor excels in local configurations, allowing a maximum of 64 inputs and 64 outputs. For distributed configurations, it supports up to 30 inputs and 32 outputs per module, accommodating a total of 500 inputs and 500 outputs throughout the entire network. The versatile network communication features enable collaboration with up to three distributed networks and two remote networks.

For communication, the 140CPU11302C includes one Modbus RS232 port and one Modbus Plus port, facilitating integration with diverse systems. The device relies on a lithium battery with a capacity of 1.2 Ah, which ensures a battery life of approximately ten years, thus reducing maintenance frequency.

Power consumption requirements for the processor are rated at 780 mA for bus current. Environmental ratings allow this unit to function optimally within temperatures from 32°F to 140°F (0°C to 60°C) and up to 95% relative humidity without condensation. The compact design delivers a weight of only 0.7 pounds (0.3 kg), making it an excellent choice for applications where space is a constraint.