

Schneider Series Service Manual

140CPU65160C

1. Description

The 140CPU65160C Unity Processor from Schneider Electric's Modicon Quantum series operates at a clock frequency of 266 MHz. This processor is equipped with 1024 kB of internal RAM and supports expandable RAM up to 7168 kB for programs and 8 MB for file storage.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line Modicon Quantum
Part	Number 140CPU65160C
Product	Unity Processor
Clock	Frequency 266 MHz
Internal	RAM 1024 kB
Expandable	RAM 7168 kB (program), 8 MB (file storage)
Number	of Slots 10
Number	of Racks 2 (local)
Distributed	I/O Stations 63 (1 rack, 3 Modbus Plus networks)
Remote	I/O Stations 31 (2 S908 remote I/O racks)
Communication	Services Ethernet router
Number	of Optional Modules 6 (Ethernet, Modbus, Modbus Plus, Profibus DP, Sy/Max)
Maximum	Number of Connections 1 (USB), 2 (AS-Interface distributed), 4 (AS-Interface remote), 6 (Ethernet TCP/IP local), 6 (Modbus Plus local), 6 (Profibus DP local), 1 (Modbus RS232/485 Modbus/ASCII)
Integrated	Connection Types 1 Modbus Plus, 1 Ethernet TCP/IP, 1 Modbus, 1 USB
Execution	Time per Instruction 0.4-0.5 µs (floating point), 0.0525-0.075 µs (Boolean)

3. Product Information

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Technical specifications for 140CPU65160C

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Number of Optional Modules 6 (Ethernet, Modbus, Modbus Plus, Profibus DP, Sy/Max)

Maximum Number of Connections 1 (USB), 2 (AS-Interface distributed), 4 (AS-Interface remote), 6 (Ethernet TCP/IP local), 6 (Modbus Plus local), 6 (Profibus DP local), 1 (Modbus RS232/485 Modbus/ASCII)

Integrated Connection Types 1 Modbus Plus, 1 Ethernet TCP/IP, 1 Modbus, 1 USB

Execution Time per Instruction 0.4-0.5 µs (floating point), 0.0525-0.075 µs (Boolean)

Description

The Schneider Electric 140CPU65160C is a Unity Processor belonging to the Modicon Quantum series. It functions at a clock frequency of 266 MHz, providing efficient processing for control applications. With 1024 kB of internal RAM, the system can be enhanced with expandable RAM, capable of supporting 7168 kB for program memory and an additional 8 MB for file storage.

This processor features ten slots for module installation and is designed to accommodate two local racks, enhancing its versatility. It is capable of managing up to 63 distributed I/O stations through a single local rack and can also interface with three Modbus Plus networks. The system supports 31 remote I/O stations via two S908 remote I/O racks, allowing for extensive network configurations.

For communication, it includes an Ethernet router with multiple connection options, such as USB, AS-Interface, and Modbus communications. The 140CPU65160C can support six local connections for Ethernet TCP/IP, Modbus Plus, and Profibus DP, along with additional connections for USB and RS232/485 Modbus/ASCII communication.

The execution time per instruction varies, clocking in at 0.4-0.5 µs for floating-point operations and 0.0525-0.075 µs for Boolean operations, which indicates its efficiency in processing tasks. Weighing in at 0.85 kilograms (1.87 pounds), this Unity Processor offers a robust solution for a variety of automation needs.