

DATASHEET

Modbus Master/Slave Communication Module MVI94-MCM

The MVI94 Modbus Master/Slave Communication Module allows Flex[®] processors to interface easily with other Modbus protocol compatible devices.

The module acts as an Options module between the Modbus network and the Flex backplane. Compatible devices include not only Modicon[®] PLCs (almost all support the Modbus protocol) but also a wide range of process and control devices from a variety of manufacturers. Many SCADA packages also support the Modbus protocol.



Functional Specifications MVI94-MCM

- Support for the storage and transfer of up to 5000 registers to/from the Flex processor's data files
- User-definable module memory usage
- Application port can emulate Modbus master or slave device
- Supports Enron version of Modbus protocol for floating point data transactions

Slave Specifications

The MVI94-MCM accepts Modbus function code commands of 1, 2, 3, 4, 5, 6, 15 and 16 from an attached Modbus master unit. A port configured as a Modbus slave permits a remote master to interact with all data contained in the module. This data can be derived from other Modbus slave devices on the network, through a master port, or from the Flex processor.

Master Specifications

A port configured as a virtual Modbus master device on the MVI94-MCM actively issues Modbus commands to other nodes on the Modbus network. One hundred (100) commands are supported on each port. Additionally, the master port has an optimized polling characteristic that polls slaves with communication problems less frequently. The Flex processor can be programmed to control the activity on the port by actively selecting commands from the command list to execute or issuing commands directly from the ladder logic.

General Specifications

Some of the general specifications include:

- Operation via simple ladder logic
- Complete setup and monitoring of module through Debug port and user configuration file
- Flex backplane interface via I/O access

FLEX I/O Interfaces

| Specification | Description |
|--|--|
| Form Factor | Single Slot 1794 Backplane compatible Locate in any slot of Backplane |
| Backplane current load | 20 mA @ 5 V |
| External power supply | 12 to 24 VDC 340 to 170 mA |
| Operating temperature | 0°C to 55°C (32°F to 131°F) |
| Storage temperature | -40°C to 85°C (-40°F to 185°F) |
| Shock | 30 g operational 50 g non-operational 5 g from 10150 Hz |
| Relative humidity | 5% to 95% (without condensation) |
| LED indicators | Module status Backplane transfer status Application status Serial activity and error LED status |
| Configuration Serial port (PRT1) | Mini-DIN RS-232 Hardware handshaking |
| Application serial Port (PRT2) | Mini-DIN RS-232/422/485 jumper selectable 500V optical isolation from backplane |
| Dimensions (with Module installed in Base) H x W x D | 3.7 x 3.7 x 2.7 in 94.0 x 94.0 x 69.0 mm |

Agency Approvals & Certifications

cUL



Additional Products

ProSoft Technology® offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms.

Ordering Information

Use the following Ordering Information to identify the radio product needed for your region. If you are unsure which radio to select, please contact your local distributor.

Modbus Master/Slave Communication Module

Standard

MVI94-MCM (Standard - Current version)

OEM

MVI94-MCM-MHI (Version 1.12M)

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft Technology distributors near you, go to:

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