



IEC 60870-5-101 Slave Serial Communication Module for ControlLogix®

MVI56-101S Edition 2

The IEC 60870-5-101 Slave Serial Communication Module allows Rockwell Automation® ControlLogix™ I/O compatible processors to interface easily with IEC 60870-5-101 protocol compatible hosts. The module's two powerful and highly-configurable redundant ports allow the many SCADA host systems supporting the IEC protocol to be integrated into the ControlLogix platform. The MVI56-101S Slave module is designed to address the application where a host systems using the IEC 60870-5-101 protocol must communicate with a ControlLogix processor. This latest version offers IEC 60870-5-101 Edition 2 protocol features, such as additional datatypes and additional Causes of Transmission (COT) support.

Features and Benefits

The MVI56-101S Edition 2 module is the best way to add IEC 60870-5-101 protocol interface support to the ControlLogix platform. This module has two powerful and highly-configurable IEC 60870-5-101 Slave serial ports, allowing many SCADA and field devices using this IEC protocol to be integrated into the ControlLogix platform.

The module acts as an input/output module between the IEC 60870-5-101 telecontrol network and the Rockwell Automation ControlLogix backplane. The data transfer from the ControlLogix processor is asynchronous from the actions on the network. A 5000-word register space in the module exchanges data between the processor and the telecontrol network.

Functional Specifications

The MVI56-101S module accepts commands from an attached master unit. A port configured as a virtual slave permits a remote master to interact with all data contained in the module. This data can be derived from the ControlLogix processor. The remote master device uses the fully-configured databases in the module to control outputs and monitor inputs. The module can operate in balanced or unbalanced mode.

- ◆ User-definable module memory usage
- ◆ Storage of IEC time used in module is available in the database
- ◆ Protocol implementation conforms to the IEC 60870-5-101 specification with fully configurable parameters
- ◆ Priority Queues
- ◆ Invalid Bit Monitoring
- ◆ Supports Balanced and Unbalanced Mode
- ◆ Supports CP24 and CP56 time formats for events
- ◆ Event generation configurable per point or data type



Hardware Specifications

Specification	Description
Backplane Current Load	800 mA @ 5 Vdc
Operating Temperature	+32°F to +140°F (0°C to +60°C)
Storage Temperature	-40°F to +185°F (-40°C to +85°C)
Shock:	30g Operational 50g non-operational Vibration: 5 g from 10Hz to 150 Hz
Relative Humidity	5% to 95%, with no condensation
LED Indicators:	Module Status Application Status Backplane Transfer Status Serial Port Activity
CFG Port (CFG)	RJ45 with DB-9M adapter included RS-232C only
App Ports (P1, P2)	RJ45 with DB-9M adapter included RS-232 handshaking configurable 500V backplane optical isolation
Configurable Parameters	Baud rate: 110 to 38,400 baud RS-232, RS-485, and RS-422 Parity: none, odd, or even Data bits: 5, 6, 7, or 8 Stop bits: 1 or 2 RTS on/off delay: 0 to 65535 ms
Shipped with Unit	RJ45 to DB-9M cables for each port 6-foot RS-232 configuration cable

Additional Products

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

Visit our web site at <http://www.prosoft-technology.com> for a complete list of products.

Ordering Information

To order this product, please use the following:

MVI56-101S IEC 60870-5-101 Slave Serial
Communication Module

How to Contact Us: Sales and Support

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