IEC 60870-5-101 Slave Communication Module

MVI56-101S

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. As such, the IEC Slave module can be used as a gateway in many SCADA installations in industries such as:

- *Power and distribution applications*
- *Petrochemical*
- *Water and Gas Applications*
- *Oil and Gas production*

How to Contact Us: Sales and Support

All ProSoft Technology products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

Asia Pacific
+603.7724.2080, asiapc@prosoft-technology.com
Languages spoken include: Chinese, Japanese, English

Europe – Middle East – Africa
+33 (0) 5.34.36.87.20, support.EMEA@prosoft-technology.com
Languages spoken include: French, English

North America
+1.661.716.5100, support@prosoft-technology.com
Languages spoken include: English, Spanish

Latin America (Sales only)
+1.281.298.9109, latinam@prosoft-technology.com
Languages spoken include: Spanish, English

Brasil
+55-11.5084.5178, eduardo@prosoft-technology.com
Languages spoken include: Portuguese, English

IEC 60870-5-101 Slave Communication Module

MVI56-101S

The MVI56 IEC 60870-5-101 Slave 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.

Features and Benefits

The MVI56-101S module is the fastest and easiest way to add IEC 60870-5-101 protocol interface support to the ControlLogix platform. It is a single slot, backplane compatible solution for the Rockwell Automation ControlLogix platform. This module has two powerful and highly configurable IEC 60870-5-101 Slave ports, allowing the many SCADA and field devices supporting the IEC protocol to be integrated into the ControlLogix platform.

The MVI56-101S 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.

General Specifications

- Single Slot – 1756 backplane compatible
- The module is recognized as an Input/Output module and has access to processor memory for data transfer between processor and module
- Ladder Logic is used for data transfer between module and processor. Sample ladder file included.
- Configuration data obtained from configuration text file downloaded to module. Sample configuration file included
- Local or remote rack

Hardware Specifications

Specification	Description
Backplane Current Load	800 mA @ 5 V
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	–40 to 85°C (–40 to 185°F)
Shock:	30g Operational 50g non-operational Vibration: 5 g from 10 to 150 Hz
Relative Humidity	5 to 95% (non-condensing)
LED Indicators:	Module Status Backplane Transfer Status Application Status Serial Activity
Debug/Configuration port (CFG)	
CFG Port (CFG)	RJ45 (DB-9M with supplied cable) RS-232 only
Application ports (PRT1 & PRT2) Full hardware handshaking control, providing radio, modem and Multi-drop support	
Software configurable communication parameters	Baud rate: 110 to 115,200 baud, depending on protocol RS-232, 485 and 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
App Ports (P1,P2) (Serial modules)	RJ45 (DB-9M with supplied cable) RS-232 handshaking configurable 500V Optical isolation from backplane
Shipped with Unit	RJ45 to DB-9M cables for each port 6-foot RS-232 configuration cable

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.

- Supports time stamp events
- Supports time and data synchronization from a master or the processor
- Supports monitored data
- Event queue supports 99 points for each data type
- Reports events by configurable priority order
- Order monitored points by interrogation groups
- Configurable deadband for monitored measured points
- Supports Master Class 1 and Class 2 polls with configurable parameters
- Acknowledgement transmission is handled internally by the module
- Configurable data link address, Common ASDU address and Information Object Address
- Configurable pulse duration.

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 Communication Module

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft distributors near you, go to http://www.prosoft-technology.com

Distributors:
Place your order by email or fax to:

North American / Latin American / Asia Pacific
orders@prosoft-technology.com,
fax to +1 661.716.5101

Europe
europe@prosoft-technology.com,
fax to +33 (0) 5.61.78.40.52

January 31, 2007