



# 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**

+60.3.7941.2888, 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, info@prosoft-technology.com Languages spoken include: English, Spanish

#### **Latin America**

+52.222.264.1814, support.la@prosoft-technology.com Languages spoken include: Spanish, English

#### Brasil

. . . . .

+55.11.5084.5178, brasil@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
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	Baud rate: 110 to 115,200 baud,
communication	depending on protocol
parameters	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)	RJ45 (DB-9M with supplied cable)
(Serial modules)	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

Copyright © ProSoft Technology, Inc. 2019. All Rights Reserved. May 3, 2019