



## IEC 60870-5-101 Slave Communication Module

### MVI46-101S

The MVI46 IEC 60870-5-101 Slave Communication Module allows Rockwell Automation SLC 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 SLC platform.

### Features and Benefits

The MVI46-101S module is the fastest and easiest way to add IEC 60870-5-101 protocol interface support to the SLC platform. It is a single slot, backplane compatible solution for the SLC 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 SLC platform.

The MVI46-101S module acts as an input/output module between the IEC 60870-5-101 telecontrol network and the SLC backplane. The data transfer from the SLC 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 - 1746 backplane compatible (Local or extended I/O rack only. Remote rack not supported)
- The module is recognized as an Input/Output module and has access to processor memory for data transfer between processor and module using M0/M1 files
- 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

## IEC 60870-5-101 Slave Communication Module

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The MVI46-101S Slave module is designed to address the application where a host systems using the IEC 60870-5-101 protocol must communicate with an SLC 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

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## Hardware Specifications

Specification	Description
Backplane Current Load	800 ma @ 5V (from backplane)
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
Relative Humidity	5% to 95% (non-condensing)
Vibration	5 g from 10150 Hz
Processor	Compatible with Rockwell Automation SLC 5/02 M0/M1 capable processors or newer
LED indicators	Module status, Backplane transfer status, Application status, Serial activity and error LED status
Debug/Configuration port (CFG)	
CFG Port (CFG)	RJ45 (DB-9M with supplied cable) RS-232 only
Configuration Connector	RJ45 RS-232 Connector (RJ45 to DB-9 cable shipped with unit)
Application Ports	
Application Serial port (PRT1, PRT2) (Serial Modules)	Two RJ45 RS-232/422/485 Application ports

## Functional Specifications

The MVI46-101S 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 SLC 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.

Compatible products in this product line also include:

### DNP 3.0 Master/Slave Communication Module for SLC (MVI46-DNP)

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:**

MVI46-101S IEC 60870-5-101 Slave  
Communication Module

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

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