# ProSof





### IEC 60870-5-101 Master Communication Module MVI71-101M

The MVI71-101M module is the ideal solution for many applications where IEC protocol connectivity must be added to a PLC system. The IEC solution is designed to address the expanding interest in the IEC protocol and the use of IEC compatible devices in industrial applications such as those in the water/wastewater power and oil & gas industries.

Compatible devices include relays, breakers, sub-station Communication Modules and other serial communication devices.

# 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

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# **DISCONTINUED** IEC 60870-5-101 Master Communication Module

# MVI71-101M

The MVI71 IEC 60870-5-101 Master Communication Module allows Rockwell Automation PLC processors to interface easily with IEC 60870-5-101 slave (controlled unit) devices.

### **Features and Benefits**

The MVI71-101M module interfaces up to 32 serial communication devices with the Rockwell Automation PLC processor. Two communication ports on the module act as controlling devices (masters) to interface with controlled devices on their own networks. Each port is individually configurable and can be set for balanced or unbalanced mode. Data is exchanged between the serial network and the Rockwell Automation processor using the internal database contained in the module and direct control by the controller's ladder logic.

### **General Specifications**

- Single Slot 1771 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.

# **Hardware Specifications**

Specification	Description
Form Factor	Single Slot 1771 chassis compatible BTR/BTW data transfer Local or remote rack
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 10150 Hz
Relative humidity	5 to 95% (non-condensing)
LED Indicators	Module status Backplane transfer status Application status Serial activity and error LED status



Specification	Description	
Debug/Configuration port (CFG)		
CFG Port (P1)	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	(2) RJ45 RS-232/422/485	

Application ports

(P2, P3) (Serial Modules)

# Functional Specifications

- Built in accordance to the approved international specification
- Two independent master ports completely user configurable
- Support for balanced and unbalanced mode
- Up to 32 sessions
- Up to five sectors (separate databases) for each session
- Individual database definition for each sector
- 1000 commands to control stations
- PLC processor can issue control commands directly to the module or a controlled device (10 at each scan)
- Pass-through of event messages from controlled device to processor for logging of time-tagged events
- Operation via simple ladder logic
- PLC processor can synchronize the module clock
- Supports clock synchronization from/to the PLC
- Receives events from the slave and sends them to the PLC processor
- Supports monitored data
  - o Single-point
  - o Double-point
  - Step-point
  - Measured-point
  - Bitstring 32-bit

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- o Integrated total point
- Class 1 and Class 2 delay parameter in the configuration file
- Complete set up and monitoring of module through RSLogix 5 software and user constructed configuration file (IEC101M.CFG)
- All data related to the module is contained in user data files to ease in the monitoring and interfacing with the module

### **Additional Products**

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

Compatible products include:

# IEC 60870-5-101 Master Communication Module for SLC (MVI46-101S)

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

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