



## IEC 60870-5-103 Master Communication Module

### MVI69-103M

The MVI69 IEC 60870-5-103 Master Communication Module allows CompactLogix I/O compatible processors to interface easily with IEC 60870-5-103 slave (controlled unit) protection devices. Devices commonly supporting the protocol include relays, breakers, sub-station Communication Modules and other serial communication devices used in power monitoring.

### Features and Benefits

The MVI69-103M supports up to 16 total field devices between the module's two IEC 60870-5-103 Master ports. The module's communication ports can be independently configured, allowing two separate field networks to be implemented. The field device data is exchanged between the MVI module and the CompactLogix processor over the backplane.

The MVI69-103M module is a powerful communication interface for CompactLogix processors. Developed under license from Rockwell Automation, the module incorporates proprietary backplane technology that enables powerful data access to the CompactLogix processor.

### General Specifications

- Single Slot - 1769 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.
- Supports all CompactLogix processors: L20/L30/L31/L32/L35, L43 and L45 (L43 and L45 supported with RSLogix 5000 v16.03 or later)
- Also supports MicroLogix 1500 LRP

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*The MVI69-103M module is the ideal solution for many applications where IEC protocol connectivity must be added to a CompactLogix 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:

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## Hardware Specifications

Specification	Description
Dimensions	Standard 1769 Single-slot module
Current Load	800 mA max@ 5 VDC Power supply distance rating of 2
Operating Temp.	0 to 60°C (32 to 140°F)
Storage Temp.	-40 to 85°C (-40 to 185°F)
Relative Humidity	5% to 95% (non-condensing)
LED Indicators	Power and Module Status Application Status Serial Port Activity Error Status
CFG Port (CFG)	RJ45 (DB-9F with supplied cable) RS-232 only No hardware handshaking
App Ports (P1,P2) (Serial modules)	RJ45 (DB-9F with supplied cable) RS-232, RS-422 and RS-485 modes supported. Both ports operate as individual IEC 60870-3-103 controlling units (masters) 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 MVI69-103M module supports the IEC 60870-5-103 protocol to the following specifications:

- The IEC 60870-5-103 communication driver is built in accordance to the approved IEC specification
- User-definable module memory usage
- The module has two independent master ports, each configurable via a simple configuration file
- Supports up to 16 sessions (controlled devices) between the two ports
- Supports up to three sectors (separate databases) for each session, with individual database definition for each sector
- Total of 1000 user configurable commands to control data transfer to/from devices (controlled devices)
- Supports clock synchronization from/to the processor
- Event data received from the Control Devices updates the module database (Date and Time stamping is not stored or used by module)
- Class 1 and Class 2 delay parameters are configurable for each session
- An IEC Interoperability Document for the module is available from the web site, which fully documents data types supported by 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 in the inRAX product line also include:

### DNP 3.0 Master/Slave Communication Module for CompactLogix / MicroLogix (MVI69-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:

MVI69-103M      IEC 60870-5-103 Master  
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:

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