





FA Control Network Communication Module MVI56-FLN

The MVI56-FLN module provides highly configurable FLnet capabilities to the ControlLogix platform. FL-net (OPCN-2) is a processor-level network conforming to specification Japan Electrical Manufacturers Association JEM1479. Developed to focus on multi-vendor communications of programmable processors, NC processors, Robotic and other Motion Control systems.

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FA Control Network Communication Module

MVI56-FLN

The MVI56-FLN FA Control Network Communication Module is a single slot solution that allows Rockwell Automation ControlLogix I/O compatible processors to easily interface with other FL-net protocol compatible devices. The module implements FL-net version 2.00 (OPCN-2) defined by JEMA (The Japan Electrical Manufacturers Association) for the standard FA control network. FL-net is a master-less system and is specified for a 50 ms cycle time for 32 nodes (with 2kbit + 2kWord cyclic data in total) and up to 254 nodes can be addressed.

The MVI56-FLN module acts as a gateway between the FL-net network and the Allen-Bradley backplane. The data transfer from the ControlLogix processor is asynchronous from the actions on the FL-net network. The module's internal database can be used to exchange Area 1 and Area 2 cyclic, network, and module status data between the processor and the FL-net network.

Features and Benefits

The MVI56-FLN module accepts commands to control and monitor the data stored in the databases. This data is passed between the module and the ControlLogix processor over the backplane for use in user applications.

General features include:

- Master-less token control method
- FA link protocol on Ethernet UDP/IP
- Cyclic data transfer: Supports virtual memory Area 1 and Area 2. The cyclic data is mapped to the modules I/O area

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



Specification	Description
Backplane Current Load	800 mA @ 5 V DC 3mA @ 24V DC
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
Application port (Ethe	rnet)
Ethernet Port (Ethernet modules)	10/100 Base-T
	RJ45 Connector
	Link and activity LED indicators
	Electrical Isolation 1500 V rms at 50 Hz to 60 Hz for 60 s, applied as specified in section 5.3.2 of IEC 60950: 1991
	Ethernet Broadcast Storm Resiliency = less than or equal to 5000 [ARP] frames-per-second and less than or equal to 5 minutes duration
Shipped with Unit	RJ45 to DB-9M cables for each port
	6-foot RS-232 configuration cable
Debug/Configuration	port (CFG)
CFG Port (CFG)	RJ45 (DB-9M with supplied cable)
	RS-232 only

Functional Specifications

Message transfer:

Server Functionality

- Log data read service
- o Log data clear service
- Network Parameter Read
- o Return Message
- o Profile Read

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- Network Management Table: According to FL-net version 2.00 specification
- Own-node Management Table: According to FL-net version 2.00 specification

- Participating Node Management Table: According to FL-net version 2.00 specification
- Network configurable via a text file
- Status and Error information

Additional Products

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

Other products available in the MVI56 suite are:

MVI56-GEC: ASCII Generic Ethernet ASCII Communications Module

MVI56-MCM: Modbus Communication Module MVI56-DFCM: DF1 Master/Slave Communications Module

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-FLN FA Control Network Communication Module

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