

DATASHEET

FA Control Network Enhanced Communication Module MVI56E-FLN

The FA Control Network Enhanced Communication Module is a single slot solution that allows ControlLogix® compatible processors to easily interface with other FL-net protocol compatible devices. The module is certified for use with the standard FA control network (FL-net version 2.00; OPCN-2), as defined by the Japan Electrical Manufacturers Association (JEMA).

The FA control network module acts as a gateway between the FL-net network and the ControlLogix backplane. The data transfer from the ControlLogix processor is asynchronous from the actions on the FL-net network.

The module accepts commands to control and monitor the data stored in the FL-net databases. This data is passed between the module and the ControlLogix processor over the backplane for use in automated process and control applications.



Features	Benefits
RSLogix™ 5000 Integrated	Module configuration and communication is integrated within RSLogix 5000
"E" for Enhancements	 Enhancements enable the module to support faster network speed, with minimal frame interval times as low as 100 microseconds (or setting 1 of the FL-net protocol)
Personality Module	 Incorporates a non-volatile Compact Flash memory for storing the module's setup and network configuration data (or personality)
	 Allows restoring of a module by simply exchanging the Personality Module (for disaster recovery) without the need to use a PC or re-configure.
Ethernet Port with Built-in Web Server	 Module Ethernet port provides a built-in web server for access to module status and to update the module firmware.
	 Local and remote diagnostics access available through the Ethernet Port (E1)

Configuration

ProSoft Configuration Builder (PCB) provides a graphical configuration tool for management of MVI56E-FLN configuration files, as well as viewing communication and module diagnostic information. The MVI56E-FLN Setup Guide, with the sample configuration, provides step-by-step instructions on how to move data through the module from the network to the processor.

General Specifications

- Single-slot, 1756 backplane-compatible
- The module appears as an Input/Output module to the ControlLogix[®] (CLX) processor
- Ladder logic is used for data transfer between module and processor
- Can be installed in Local or Remote CLX racks

Functional Specifications MVI56E-FLN

- Message Transfer Command functions
 - Log data read service (server function)
 - Log data clear service (server function)
 - Network Parameter Read (server function)
 - o Return Message (server function)
 - Profile Read (server function)
 - o Network Management Table: According to FL-net version 2.00 specification
 - o Own-node Management Table: According to FL-net version 2.00 specification
 - Participating Node Management Table: According to FL-net version 2.00 specification
 - Maximum 249 nodes of user data
- Discovery service: Allows ProSoft Configuration Builder (or separate utility) to find and display products located on the network with key product attributes such as name, serial number, and IP address.
- LED Display: LED provides detailed, plain English diagnostics and error information for the module, backplane communication, and network conditions.
- Master-less token control method.
- FA link protocol on Ethernet UDP/IP
- Cyclic data transfer: Supports virtual memory Area 1 (512 words) and Area 2 (8192 words). The cyclic data is mapped to the modules I/O area.
- Configurable Mapping Feature: Optimization of Input Data mapping from the network
- Configurable Minimum Frame Interval Time (0 to 50 with each unit being equal to 100 ms)
- Configurable Token Watchdog Time (1 to 255 ms)



Where Automation Connects™

Global Distribution

ProSoft Technology® products are distributed and supported worldwide through a network of over 500 distributors in over 50 countries. Our knowledgeable distributors are familiar with your application needs. For a complete list of distributors, go to our web site at:

www.prosoft-technology.com

Global Support

We are there for you

All ProSoft Technology products are backed with free technical support. Contact our worldwide Technical Support team directly by phone or email.

Global Offices

We are where you are

ProSoft Technology has regional offices worldwide available to help you with all your industrial application needs. If you need help choosing a ProSoft Technology solution for your particular application check out our contact information under distributor sales on the web site at:

www.prosoft-technology.com

Whether your application is large or small, our technical professionals are there to help you choose the right communication solution.

Hardware Specifications

Specification	Description
Backplane Current Load	800 mA @ 5 Vdc
	3 mA @ 24 Vdc
Operating Temperature	32° F to 140°F (0° C to 60°C)
Storage Temperature	-40° F to 185°F (-40° C to 85°C)
Shock	30g Operational
	50g Non-operational
	Vibration: 5g from 10 Hz to 150 Hz
Baud Rate	10/100 Mbit/s
Relative Humidity	5% to 95% RH, with no condensation
LED Indicators	Module Status (OK)
	Application Status(APP)
	ERR (not used)
Ethernet Ports	
Ethernet Port 1(E1)	10/100 Base-T
Configuration only	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
Ethernet Port 2 (E2)	10/100 Base-T
FL-net Application Only	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 Ethernet cable for each port
Debug/Configuration port (CFG)
CFG Port (CFG)	RJ45 Ethernet port
	-

Agency Approvals & Certifications

Please visit our website: www.prosoft-technology.com



Where Automation Connects™ Global Distribution

ProSoft Technology® products are distributed and supported worldwide through a network of over 500 distributors in over 50 countries. Our knowledgeable distributors are familiar with your application needs. For a complete list of distributors, go to our web site at:

www.prosoft-technology.com

Ordering Information

To order this product, please use the following:

FA Control Network Enhanced Communication Module

MVI56E-FLN

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft Technology distributors near you, go to:

www.prosoft-technology.com

and select *How to Buy* from the menu.

Copyright © 2019 ProSoft Technology, Inc.
All rights reserved. 8/1/2019

Specifications subject to change without notice