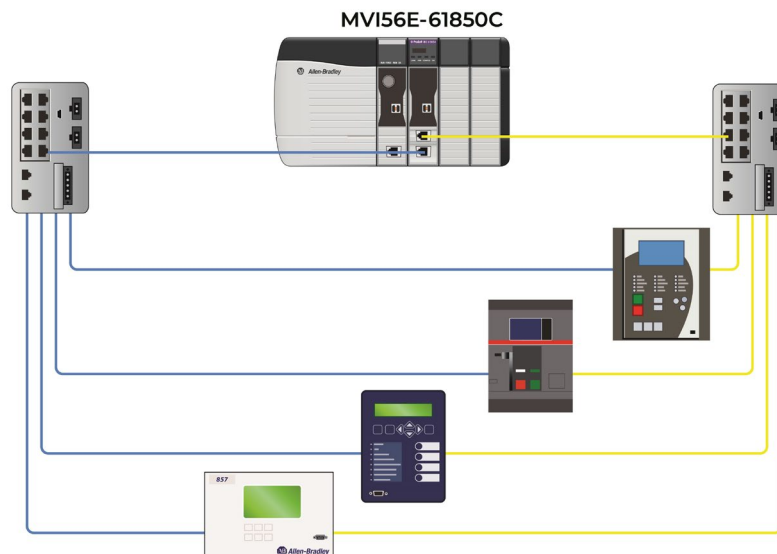


IEC 61850 Client Communication Module for ControlLogix[®] MVI56E-61850C

The ProSoft Technology[®] IEC 61850 communication module allows Rockwell Automation[®] ControlLogix[®] PACs to interface with IEC 61850 Intelligent Electronic Devices (IED) such as substation power monitors and protective relays. The module operates as an IEC 61850 Client supporting the polling of devices using MMS messaging and reports. Additionally, support for GOOSE messaging as both a publisher and subscriber allows for fast data transfer between devices on an IEC 61850 network.

The dual Ethernet ports on the module provide support for Parallel Redundancy Protocol (PRP), and the module supports IEEE C37.238-2017 Power Profile for precision time synchronization of field devices.



Features

- ◆ Support for up to 40 IEC 61850 Server devices on the network.
- ◆ Support for MMS, MMS Reports, GOOSE publisher, GOOSE subscriber, and control functions on an IEC 61850 Network.
- ◆ Parallel Redundancy Protocol (PRP) supported for Ethernet redundancy with compatible devices.
- ◆ Time synchronization based on Precision Time Protocol (PTP) support per C37.238-2017 standard (ordinary and boundary clock mode supported).
- ◆ The supplied configuration software enables you to import all of your relevant IED tags into your Logix[®] controller tag database, reducing configuration time and errors.
- ◆ Up to 225 I/O connections to the ControlLogix[®] processor providing large amounts of data to transfer in a real-time environment.
- ◆ Standards-based identification of device types simplifies implementation and maintenance.

Configuration

Configuration is accomplished through a custom Add-On Profile for Studio 5000™ that launches the MVI56E-61850C Configuration Manager software, which can be downloaded from our website, www.prosoft-technology.com. The configuration utility automatically creates data tags and Add-On Instruction to be used in ControlLogix® 1756-L8x processors with Studio 5000 version 32 and greater and brings the data over as configured using the tag name of the device in the IEC 61850 network. This intuitive configuration utility saves the user valuable time and effort when building Rockwell Automation® projects with IEC 61850 devices on the network.

Specifications – IEC 61850

Specification	Value
Supported Standard	IEC 61850 Ed 2.0
Maximum Number of IEDs	40
Supported Reports	Buffered Report Control Block (BRCB) Unbuffered Report Control Block (URCB)
Control	Direct-with-Normal-Security SBO-with-Normal-Security Direct-with-Enhanced-Security SBO-with-Enhanced-Security
Maximum Number of Reports per IED	10
GOOSE	GOOSE Subscription GOOSE Publish
Maximum Number of GOOSE Subscription per IED	4
Maximum Number of GOOSE Publish	8
Maximum Number of Tags per IED	500
Maximum Number of Tags	20,000
Status	Status available per node Report and GOOSE status available High-level status data available within Studio 5000

Backplane Specifications

Specification	Value
Maximum Number of Class 1 Connections	225
Maximum Number of Class 1 High Priority Connections	50
High Priority Connection RPI Range	[4..9,999] ms
Normal Priority Connection RPI Range	[100..9,999] ms
Maximum Class 1 Connection Input Size	500 bytes
Maximum Class 1 Connection Output Size	496 bytes

Time Synchronization Specifications

Specification	Value
Time Synchronization Standard	C37.238-2017
Supported Modes	Ordinary Clock, Boundary Clock



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Hardware Specifications

Specification	Description
Backplane Current Load	1.4 A @ 5.1 VDC
Operating Temperature	-25 - 60 °C (Series C Chassis)
IEC 60068-2-1 (Test Ad, Operating Cold)	-25 - 50 °C (Series B Chassis)
IEC 60068-2-2 (Test Bd, Operating Dry Heat)	
IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	
Temperature, non-operating	-40°C to 85°C (-40°F to 185°F)
IEC 60068-2-1 (Test Ab, Unpackaged Cold)	
IEC 60068-2-2 (Test Bb, Unpackaged Dry Heat)	
IEC 60068-2-14 (Test Na, Unpackaged Thermal Shock)	
Relative Humidity	5...95% noncondensing
IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	
Vibration	2g @ 10...500 Hz
IEC 60068-2-6 (Test Fc, Operating)	
Shock, operating	30g
IEC 60068-2-27 (Test Ea, Unpackaged Shock)	
Shock, non-operating	30g
IEC 60068-2-27 (Test Ea, Unpackaged Shock)	
Emissions	IEC 61000-6-4
ESD immunity	4 kV contact discharges
IEC 61000-4-2	8 kV air discharges
Radiated RF immunity	10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz
IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz
EFT/B immunity	+/- 2 kV at 5 kHz on Ethernet ports
IEC 61000-4-4	
Surge transient immunity	+/- 2 kV line-earth (CM) on Ethernet ports
IEC 61000-4-5	
Conducted RF immunity	10V rms with 1 kHz sine-wave 80% AM from 150 kHz...80 MHz
IEC 61000-4-6	
Ethernet Ports (E1, E2)	(2) GbE RJ45 Connector Link and Activity LED indicators
Dimensions	Standard 1756 Single-slot module

Agency Approvals and Certifications

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

Additional Products

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

For a complete list of products, visit our website at:

www.prosoft-technology.com

Ordering Information

To order this product, please use the following:

ControlLogix® IEC 61850 Client Communications Module

MVI56E-61850C

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

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