COMPLETE PRODUCT INFORMATION / EXACT-MODEL DASHBOARD

PROSOFT MVI56E-MCMXT

Modbus Communication Module

PROSOFT MVI56E-MCMXT is an enhanced Modbus RTU/ASCII master/slave communication module for the ControlLogix backplane, with two independently configurable serial ports and extreme-environment construction.

01	02	03	04
Two independently configurable Modbus serial ports	RTU and ASCII master/slave operation	10,000-word user-controlled database	Conformal-coated MCMXT extreme-environment hardware

System position

Modbus serial devices	Two configurable serial ports	MVI56E-MCMXT internal database	ControlLogix backplane I/O images

Verified technical matrix

Protocol	Modbus RTU / ASCII master or slave
Serial ports	2 independently configurable ports
Serial electrical modes	RS-232, RS-422, or RS-485, jumper-selectable
Baud rate	110 to 115,200 baud
Database	10,000 words of user data
Backplane current	800 mA at 5 V DC; 3 mA at 24 V DC
Ethernet service port	10/100Base-T RJ45 with auto-crossover detection

Operating temperature	0 °C to +60 °C
Storage temperature	–40 °C to +85 °C
Relative humidity	5% to 95%, non-condensing
Shock	30 g operating; 50 g non-operating
Vibration	5 g from 10 to 150 Hz
Construction	Conformal coating for the MVI56E-MCMXT
Command capacity	Up to 325 commands with firmware 3.01+ and Add-On Instruction 2.8+; earlier versions support up to 100

Controlled engineering use

Legacy Modbus integration

Connects RTU or ASCII serial devices to a ControlLogix controller without a separate gateway.

Dual-network polling

Allows each serial port to operate on the same or different Modbus networks.

Master/slave bridging

Configures either port as a Modbus master or slave according to the control architecture.

Harsh cabinet service

Uses the conformal-coated MCMXT construction for documented extreme-environment deployments.

Interface architecture

Backplane

ControlLogix input and output images with asynchronous Modbus data transfer

Serial

Two RJ45 serial ports supplied for RS-232, RS-422, or RS-485 service

Ethernet

10/100Base-T RJ45 service interface with link and activity indicators

Diagnostics

Application and module status LEDs plus a four-character alphanumeric display

INSTALLATION DECISION POINTS

1

Match the complete PROSOFT MVI56E-MCMXT model, not the standard MVI56E-MCM, before installation.

2

Record the ControlLogix slot, module configuration, IP settings, serial-port modes, and database mapping before replacement.

3

Select RS-232, RS-422, or RS-485 jumpers for each serial port before connecting field wiring.

4

Confirm serial baud rate, data bits, parity, stop bits, and RTU or ASCII mode for every attached network.

System and configuration boundary

Identity

Retain PROSOFT MVI56E-MCMXT in purchasing, drawings, and labels.

Installed state

Archive position, wiring, settings, and the as-found condition.

Test boundary

Use the approved site procedure and documented test points.

Compatibility

Verify the exact article identity before substitution.

FAQ and model-specific acceptance

Engineering decision matrix

Engineering decision	Controlled response
Which protocols does PROSOFT MVI56E-MCMXT support?	It supports Modbus RTU and Modbus ASCII, with each serial port configurable as a master or slave.
How many serial ports does PROSOFT MVI56E-MCMXT provide?	It provides two independently configurable serial ports.
Which serial interfaces can PROSOFT MVI56E-MCMXT use?	Each port can be jumper-selected for RS-232, RS-422, or RS-485 operation.
How does PROSOFT MVI56E-MCMXT exchange data with the controller?	It transfers data asynchronously through the ControlLogix backplane input and output images.

Release precautions

5

Keep the 5 V and 24 V backplane current requirements within the rack power budget.

6

Verify the installed firmware and Add-On Instruction versions before configuring more than 100 commands.

7

Use shield, grounding, termination, and network-topology practices appropriate to the selected serial standard.

8

Commission both serial channels, backplane data transfer, diagnostics, and controller tag mapping before release.

Configuration-control record

As found

Record model, installed position, wiring, settings, and condition.

Comparison

Match each populated technical value to the controlled replacement record.

As left

Archive configuration, measured values, diagnostics, and test results.

Release

Identify the approver, date, work order, and affected system boundary.

Remaining decisions and acceptance evidence

Engineering decision matrix

Engineering decision	Controlled response
What database capacity is available in PROSOFT MVI56E-MCMXT?	The module provides a 10,000-word user-controlled database.
What distinguishes PROSOFT MVI56E-MCMXT from MVI56E-MCM?	The MCMXT version is designed for the Logix-XT environment and includes conformal coating for harsher conditions.
What is required to use up to 325 commands in PROSOFT MVI56E-MCMXT?	Use module firmware 3.01 or later together with Add-On Instruction version 2.8 or later; earlier versions support up to 100 commands.
What should be verified during PROSOFT MVI56E-MCMXT commissioning?	Verify both port modes and serial settings, database addresses, controller tags, backplane transfer, Ethernet diagnostics, and live Modbus reads and writes.

Evidence applicability

Evidence record	Applicable scope
ProSoft Technology MVI56E-MCM / MVI56E-MCMXT User Manual	Supports only the exact-model or explicitly applicable family facts used in this document.
ProSoft Technology exact-family product specification	Supports only the exact-model or explicitly applicable family facts used in this document.

Acceptance evidence to retain

Identity	Connections	Configuration	Function
Photograph and record the exact PROSOFT MVI56E-MCMXT nameplate.	Archive terminal, cable, shield, polarity, and connector checks.	Retain the approved parameters, settings, and as-left project record.	Record loaded operation, diagnostics, and the affected control-path test.

Commissioning handover record

Controlled return to service

Confirm isolation release	Apply power under observation	Verify diagnostics and signals	Complete functional acceptance

Related Apter Power references

Related Apter Power references	Scope note
PROSOFT MVI56	Portfolio reference only; verify compatibility independently.
PROSOFT MVI56E-MNETXT	Portfolio reference only; verify compatibility independently.
PROSOFT MVI56E-MNET	Portfolio reference only; verify compatibility independently.

	Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com	Model record PROSOFT MVI56E-MCMXT Modbus Communication Module Verify the complete nameplate before installation.