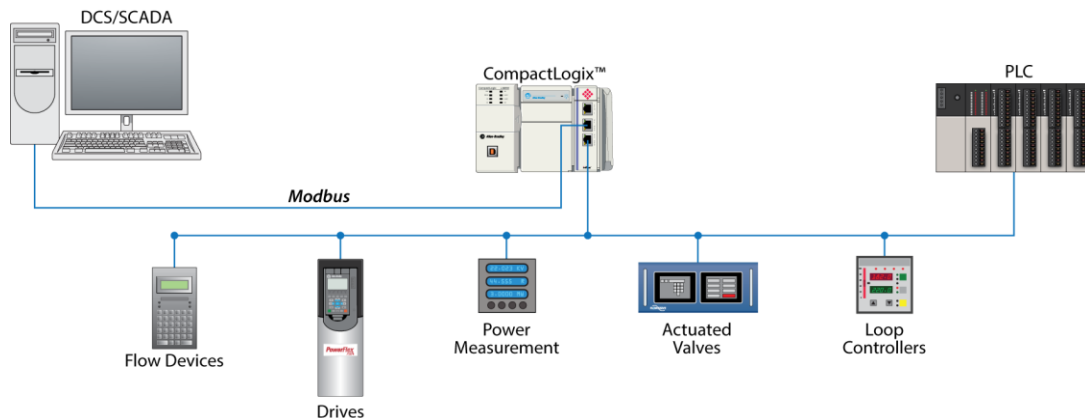


Modbus Serial Enhanced Communication Module MVI69E-MBS



The MVI69E-MBS Modbus Serial module for CompactLogix™ is designed for all applications requiring Modbus Serial connectivity. This module comes with an Add-on Profile and an Add-on Instruction to reduce commissioning time. The MVI69E-MBS has two serial ports and can support both Master and/or Slave connectivity to interface with a variety of devices using the Modbus Protocol.



Features

- ◆ Supports CompactLogix processors with 1769 I/O bus capability version 16 and greater (MicroLogix 1500 not supported)
- ◆ Add-on Instruction creates UDTs, providing logical definitions for I/O, status, and control data
- ◆ Add-on Profile support, improving integration in the CompactLogix System
- ◆ Diagnostic data available in processor controller tags, enabling decisions to be made based upon node health
- ◆ Module configuration backed up in CompactLogix project (ACD file)
- ◆ Module acts as a co-processor reducing impact to PLC scan time
- ◆ Supports up to 10,000 words of data
- ◆ Supports up to 250 Modbus Commands per port
- ◆ Each port can be configured individually as a Modbus Master or Modbus Slave device
- ◆ Supports Enron and Daniel-style Floating point data implementations
- ◆ Suitable for SCADA and field device interface applications

General Specifications

Specification	Description														
Configuration	ProSoft Configuration Builder														
I/O Size	60/120/240 - 16 bit integers														
Communication parameters	Baud Rate: 110 to 115K baud Stop Bits: 1 or 2 Data Size: 7 or 8 bits Parity: None, Even, Odd RTS Timing delays: 0 to 65535 milliseconds														
Modbus Modes	RTU mode (binary) with CRC-16 ASCII mode with LRC error checking														
Floating Point Data	Floating point data movement supported, including configurable support for Enron, Daniel®, and other implementations														
Modbus Function Codes Supported	<table border="0"> <tr> <td>1: Read Coil Status</td> <td>15: Force(Write) Multiple Coils</td> </tr> <tr> <td>2: Read Input Status</td> <td>16: Preset (Write) Multiple Holding Registers</td> </tr> <tr> <td>3: Read Holding Registers</td> <td>17: Report Slave ID (Slave Only)</td> </tr> <tr> <td>4: Read Input Registers</td> <td>22: Mask Write Holding Register (Slave Only)</td> </tr> <tr> <td>5: Force (Write) Single Coil</td> <td>23: Read/Write Holding Registers (Slave Only)</td> </tr> <tr> <td>6: Preset (Write) Single Holding Register</td> <td></td> </tr> <tr> <td>8: Diagnostics (Slave Only, Responds to Sub function 00)</td> <td></td> </tr> </table>	1: Read Coil Status	15: Force(Write) Multiple Coils	2: Read Input Status	16: Preset (Write) Multiple Holding Registers	3: Read Holding Registers	17: Report Slave ID (Slave Only)	4: Read Input Registers	22: Mask Write Holding Register (Slave Only)	5: Force (Write) Single Coil	23: Read/Write Holding Registers (Slave Only)	6: Preset (Write) Single Holding Register		8: Diagnostics (Slave Only, Responds to Sub function 00)	
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Modbus Master

Specification	Description
Command List	Up to 250 command per Master port, each fully configurable for function, slave address, register to/from addressing and word/bit count.
Polling of command list	Configurable polling of command list, including continuous and on change of state.
Status Data	Error codes available on an individual command basis. A slave status list is maintained per active Modbus Master port.

Modbus Slave

Specification	Description
Node address	1 to 247 (software selectable)
Status Data	Error codes, counters and port status available per configured slave port

Hardware Specifications

Specification	Description
Dimensions	Standard 1769 Single-slot module
Current Load	500 mA max @ 5 VDC Power supply distance rating of 4
Operating Temp.	32° F to 140° F (0° C to 60°C)
Storage Temp.	-40° F to 185° F (-40° C to 85° C)
Relative Humidity	5% to 95% (with no condensation)
LED Indicators	OK - Module Status ETH - Ethernet Communication P1 - Port 1 Serial Communication P2 - Port 2 Serial Communication BP - Backplane Connectivity CFG - Valid Configuration
Debug Port	10/100 Ethernet Port (auto-negotiating)
App Ports (P1,P2)	RS-232, RS-485 or RS-422 RJ45 (DB-9F with supplied cable) RS-232 handshaking configurable 500V Optical isolation from backplane
Shipped with Unit	2 - RJ45 to DB-9M cables for application ports 2 - DB-9F breakout boards

Agency Approvals & Certifications

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