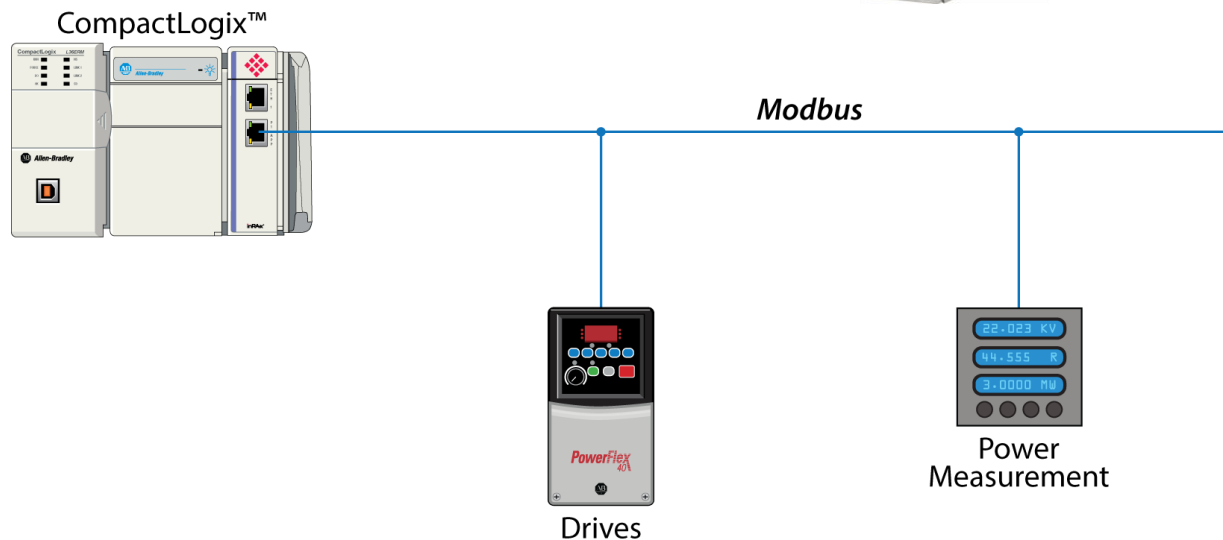# DATASHEET

Modbus Serial Lite Communication Module
MVI69L-MBS

The MVI69L-MBS, Modbus Serial module for the CompactLogix™ series of controllers is designed for smaller applications where communication between a few Modbus Serial devices is required. This module has an Add-on Profile and an Add-on Instruction to reduce commissioning time. The MVI69L-MBS has a single serial port and can support either Master or Slave connectivity to interface with a variety of devices using the Modbus Protocol.

CompactLogix™

Modbus

PowerFlex

Drives

22.023 KV
44.555 R
3.0000 MW

Power Measurement

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 240 words of I/O data
- Application port can be configured as either a Modbus Master or Modbus Slave
- Supports up to 30 Modbus Commands as a Modbus Master
- Supports Enron and Daniel style Floating point data implementations
- Most suitable for OEM and Machine Builder applications

General Specifications

Configuration	ProSoft Configuration Builder
I/O Size	240/240 - 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	1: Read Coil Status 2: Read Input Status 3: Read Holding Registers 4: Read Input Registers 5: Force (Write) Single Coil 6: Preset (Write) Single Holding Register 8: Diagnostics (Slave Only, Responds to Subfunction 00)	15: Force(Write) Multiple Coils 16: Preset (Write) Multiple Holding Registers 17: Report Slave ID (Slave Only) 22: Mask Write Holding Register (Slave Only) 23: Read/Write Holding Registers (Slave Only)

Functional Specifications

Modbus Master

A port configured as a Modbus Master actively issues Modbus commands to other nodes on the Modbus network.

Command List	Up to 30 commands, 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 on an active Modbus Master port.

Modbus Slave

A port configured as a Modbus Slave permits a remote Master to interact with all data contained in the module.

Node address	1 to 247 (software selectable)
Status Data	Error codes, counters and port status available on an active Modbus Slave port

Hardware Specifications

Specification	Description
Dimensions	Standard 1769 Single-slot module
Current Load	450 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 - Serial Communication
	BP - Backplane Connectivity
	CFG - Valid Configuration
Debug Port	10/100 Ethernet Port
App Ports (P1)	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	1 - RJ45 to DB-9M cables for application port
	1 - DB-9F breakout boards

Agency Approvals and Certifications

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

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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 web site at: www.prosoft-technology.com

Ordering Information

To order this product, please use the following:

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MVI69L-MBS

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