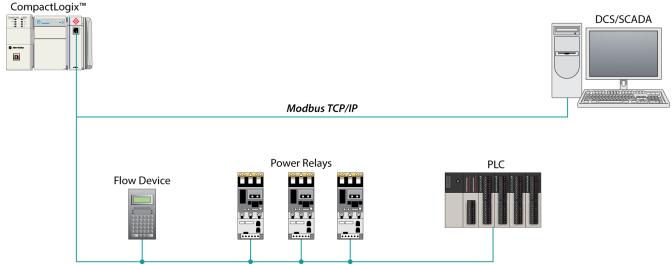


# **DATASHEET**

# Modbus TCP/IP Enhanced Communication Module MVI69E-MBTCP

The MVI69E-MBTCP Modbus TCP/IP module for the CompactLogix™ series of controllers is designed for all applications requiring Modbus TCP connectivity. This module comes with an Add-on Profile and an Add-on Instruction to reduce commissioning time. The MVI69E-MBTCP has a single Ethernet port for diagnostic and application data. The module supports both Client and Server 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 20 Client and 20 Server connections simultaneously
- Supports Enron and Daniel style Floating point data implementation
- Suitable for SCADA and field device interface applications

### **General Specifications**

Configuration	ProSoft Configuration Builder	
I/O Size	60/120/240 - 16 bit integers	
Available Data	10,000 words	
Floating Point Data	Floating point data movement supported, including configurable support for Enron, Daniel <sup>®</sup> , 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 Sub function 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 Client**

Configured as a Modbus Client, the module actively issues Modbus commands to other nodes on the Modbus network.

Client Connections	20
Command List	Up to 16 command per Client connection, each fully configurable for function, slave address, register to/from addressing and word/bit count.
Command Control	Configured commands can be controlled directly from ladder logic
Polling of command list	Configurable polling of command list, including continuous and on change of data.
Status Data	Error codes available on an individual command basis. In addition, a slave status list is maintained per active Modbus Client

#### **Modbus Server**

Configured as a Modbus Server, the module acts as a node and permits a remote Client to interact with all data contained in the module.

Server Connections	10 - MBAP Connections 10 - Encapsulated Modbus Connections
Status Data	Error codes, counters and port status available per configured slave



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**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	Configuration Status	
	Application Status	
	Backplane Connectivity Status	
	Module Status	
Debug/App Port	10/100 Ethernet Port (Auto-negotiating)	
Shipped with Unit	1 - 6 foot Ethernet Cable	

# **Agency Approvals & Certifications**

Agency	
ATEX; Category 3, Zone 2	
CE Mark	
CSA; CB Safety	
Environmental	
KCC	
RoHS Compliant	
UL/cUL; Class 1, Div. 2 Groups A, B, C, D	



## **Additional Products**

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To order this product, please use the following:

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MVI69E-MBTCP

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