ProSoft Technology MVI69-MNETC

Modbus TCP/IP Multi-Client Communication Module

ProSoft Technology MVI69-MNETC connects a 1769-based controller application to multiple Modbus TCP/IP server devices. Its 30 independent clients can initiate concurrent communication sessions, distributing polling work across meters, instruments and other Modbus-enabled equipment. Each client has its own command list, while a shared register database transfers the collected data to the controller. This client-only design serves applications in which the PLC initiates read and write requests to several Ethernet devices.



Technical Specifications

Product Identity	
Manufacturer	ProSoft Technology
Model	MVI69-MNETC
Platform	CompactLogix / MicroLogix 1769 I/O
Functional Configuration	
Protocol role	Modbus TCP/IP client
Independent clients	30
Ethernet	10/100Base-T, RJ45
Configuration port	RS-232, RJ45
Performance & Power	
Commands per client	Up to 16
Backplane current	800 mA at 5 V DC
Power-supply distance	2 slots
Environment	
Operating temperature	0 to +60 °C
Storage temperature	–40 to +85 °C

Selected original manufacturer pages follow on pages 3–5.

Compatibility & Selection Guide

1769 controller integration. MVI69-MNETC fits a CompactLogix or MicroLogix 1769 system. It must be within two slots of the power supply. Use the controller's module-specific ladder logic for data exchange and ProSoft Configuration Builder for client settings.

Modbus server selection. Select this module when the 1769 application initiates Modbus TCP/IP transactions to server devices. Client command entries identify the server, function, remote address and internal destination or source.

Wiring & Installation Reference

Ethernet connection

Network. Connect the port marked Ethernet to a non-PoE switch or hub. Assign a unique static IP address, subnet and any required gateway.

Configuration. The other RJ45 connection is the RS-232 configuration/debug port.

1769 mounting

Remove power. The module is not hot-swappable.

Align the bus. Engage the upper and lower tongue-and-groove guides and align the adjacent bus connectors.

Lock the module. Move the bus lever fully left until it clicks and close the DIN-rail latches. Keep within the two-slot power-supply distance rating.

Installation precautions. Never connect the Ethernet port to a network that supplies AC or DC power over the Ethernet cable. Remove rack power before inserting or removing this module.

Mounting reference · PDF page 3 | Installation / connection reference · PDF page 4 | Installation / connection reference · PDF page 5

Source: ProSoft Technology MVI69-MNETC manufacturer manual, November 11, 2010.

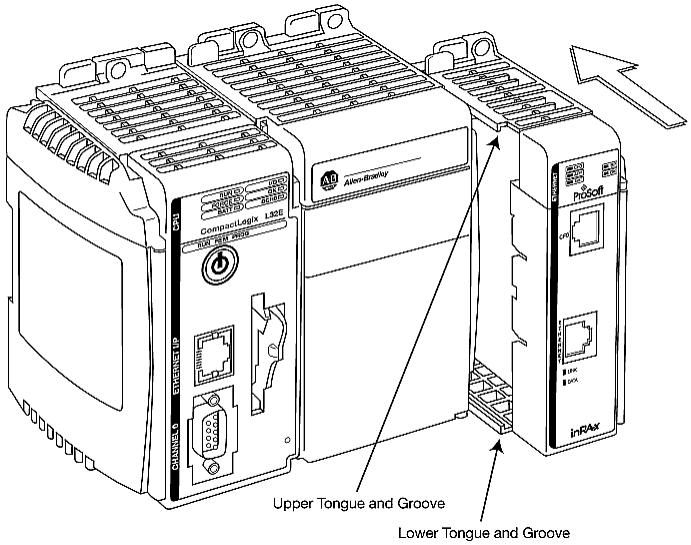
1.5 Installing the Module in the Rack

This section describes how to install the module into a CompactLogix or MicroLogix rack.

Before you attempt to install the module, make sure that the bus lever of the adjacent module is in the unlocked (fully right) position.

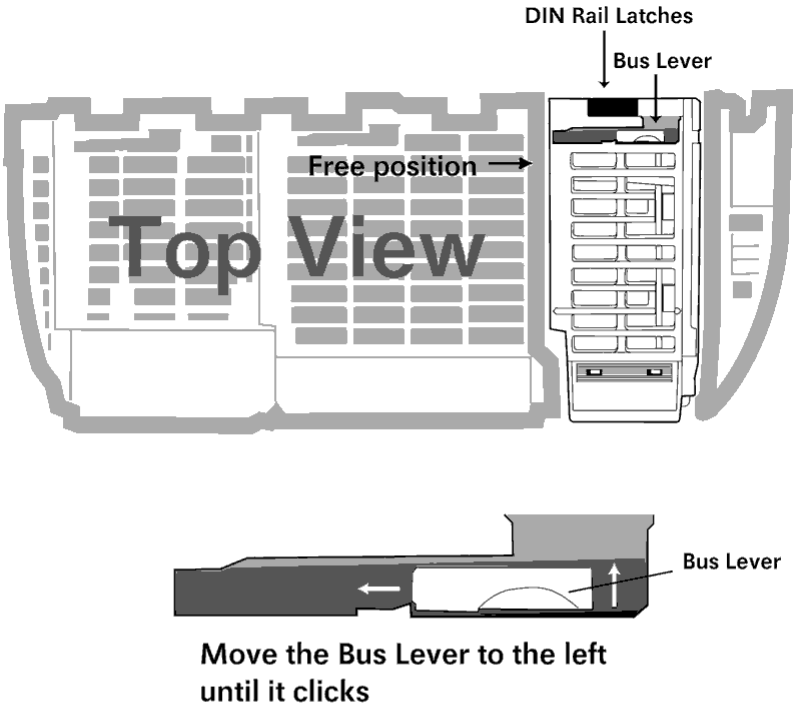
Warning: This module is not hot-swappable! Always remove power from the rack before inserting or removing this module, or damage may result to the module, the processor, or other connected devices.

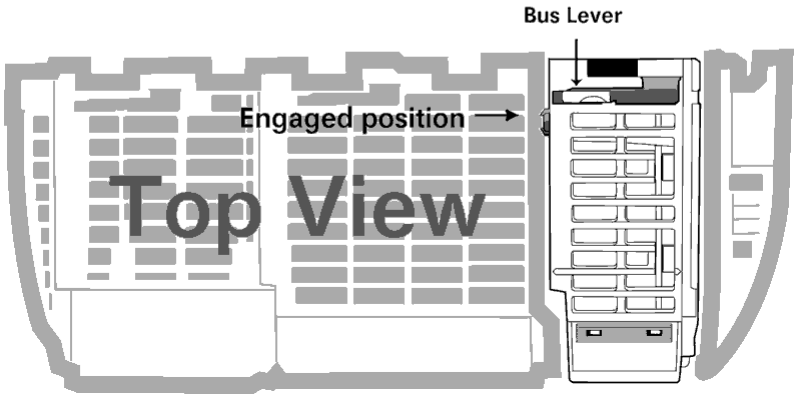
1 Align the module using the upper and lower tongue-and-groove slots with the adjacent module and slide forward in the direction of the arrow.



2 Move the module back along the tongue-and-groove slots until the bus connectors on the MVI69 module and the adjacent module line up with each other.

3 Push the module's bus lever back slightly to clear the positioning tab and move it firmly to the left until it clicks. Ensure that it is locked firmly in place.





4 Close all DIN-rail latches.

5.3 Cable Connections

The MVI69-MNETC module has the following functional communication connections installed:

- One Ethernet port (RJ45 connector)
- One RS-232 Configuration/Debug port (RJ45 connector)

5.3.1 Ethernet Connection

The MVI69-MNETC module has an RJ45 port located on the front of the module, labeled *Ethernet*, for use with the TCP/IP network. The module is connected to the Ethernet network using an Ethernet cable between the module's Ethernet port and an Ethernet switch or hub.

Note: Depending on hardware configuration, you may see more than one RJ45 port on the module. The Ethernet port is labeled *Ethernet*.
Warning: The MVI69-MNETC module is NOT compatible with Power Over Ethernet (IEEE802.3af / IEEE802.3at) networks. Do NOT connect the module to Ethernet devices, hubs, switches or networks that supply AC or DC power over the Ethernet cable. Failure to observe this precaution may result in damage to hardware, or injury to personnel.
Important: The module requires a static (fixed) IP address that is not shared with any other device on the Ethernet network. Obtain a list of suitable IP addresses from your network administrator BEFORE configuring the Ethernet port on this module.