

DATASHEET

EtherNet/IP Client/Server Communication Module MVI71-DFNT

The EtherNet/IP Client/server Communication module is a single slot solution that provides a powerful connection between Rockwell Automation's PLC processor and EtherNet/IP (DF1 for Ethernet) network applications.

The module can send read or write commands to remote devices on the EtherNet/IP network. The EtherNet/IP Client/server Communication module also has 20 servers that allow the module to receive commands from remote devices. The EtherNet/IP Client/server Communication module Pass-Through server allows the user to edit and transfer the PLC ladder logic using an Ethernet connection. Up to 100 commands can be configured by the user.



Features

Benefits

| | |
|---|---|
| EtherNet/IP Client and Server | <ul style="list-style-type: none"> ◆ Integrate with widely available Rockwell Automation and 3rd party products and services worldwide ◆ Client/server Explicit Messaging communication supported ◆ 20 server connections ◆ Client connection supporting 100 communication commands |
| ProSoft Configuration Builder software included | <ul style="list-style-type: none"> ◆ Graphical drag-and-drop configuration tool for simple module configuration ◆ Easy-to-use diagnostics window with menu-driven hardware and protocol diagnostics ◆ View module database contents through serial connection to a desktop PC |

Configuration

ProSoft Configuration Builder (PCB) provides a PC-based software configuration solution for quick management of module configuration files, as well as viewing communication and network diagnostics.

PCB is not only a powerful solution for new configuration files, but also allows you to import information from previously installed (known working) configurations into new projects.

Functional Specifications

- ◆ PLC processor in-chassis EtherNet/IP bridge to optimize data throughput while communicating with HMI or SCADA and other control platforms without losing valuable process control bandwidth
- ◆ Support of up to 4000 PLC registers user data files
- ◆ User-definable module memory usage
- ◆ 10/100 Base-T Ethernet compatible interface
- ◆ Functions as a server or a client
- ◆ Configurable parameters for the client include:
 - ◆ A minimum response delay of 0 to 65535 milliseconds
 - ◆ A response timeout of 1 to 65535 milliseconds
 - ◆ A retry count of 0 to 20
- ◆ Status data available in ladder logic

Support for PLC processor programming over Ethernet using a TCP/IP service and a serial port on the module connected to channel 0 of the processor. The module's third port emulates Channel 0 of the processor to pass through messages from the port to the processor

Server Specifications

- ◆ Supports EtherNet/IP explicit, connected, and unconnected class messaging
- ◆ Twenty independent server connections permit remote clients to interact with all data contained in the module
- ◆ Data can be derived from other clients on the network, through the client on the module, or from the PLC processor

Client Specifications

- ◆ Actively issues connected, explicit messages to other nodes on the network
- ◆ Supports 100 user-defined commands from a single client
- ◆ Allows command control from ladder logic
- ◆ Pass-through services
- ◆ Permits remote programming of the PLC processor on the Ethernet network via a pass-through
- ◆ TCP/IP service and a serial communication port (pass-through port) on the module
- ◆ The third port on the module can emulate the Channel 0 port on the PLC, This allows a DF1 master device attached to the emulated (Channel 0) port to monitor and control data in the PLC

General Specifications

- ◆ Single Slot - 1771 backplane compatible
- ◆ The module is recognized as an Input/Output module and has access to processor memory for data transfer between processor and module
- ◆ Ladder Logic is used for data transfer between module and processor. Sample ladder file included.



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Hardware Specifications

| Specification | Description |
|----------------------------------|---|
| Form Factor | Single Slot 1771 chassis compatible BTR/BTW data transfer Local or remote rack |
| Backplane current load | 800 mA @ 5 V |
| Operating temperature | 32°F to 140°F (0°C to 60°C) |
| Storage temperature | -40°F to 185°F (-40°C to 85°C) |
| Shock | 30g operational 50g non-operational |
| Vibration | 5 g from 10150 Hz |
| Relative Humidity | 5% to 95%, RH with no condensation |
| LED Indicators | Module status Backplane transfer status Application status Serial activity and error LED status |
| Configuration Serial Port (CFG) | DB-9M PC compatible RS-232 Hardware handshaking |
| Ethernet Port (Ethernet modules) | RJ45 Connector Link and activity LED indicators Electrical Isolation 1500 V rms at 50 Hz to 60 Hz for 60 s, applied as specified in section 5.3.2 of IEC 60950: 1991 Ethernet Broadcast Storm Resiliency = less than or equal to 5000 [ARP] frames-per-second and less than or equal to 5 minutes duration |

Agency Approvals and Certifications

| | |
|------------------|--|
| CE | EMC-EN61326-1:2006; EN61000-6-4:2007 |
| CSA | C22.2 No. 213-1987 |
| CSA CB Certified | IEC61010 |
| ATEX | EN60079-0 Category 3, Zone 2 EN60079-15 |



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Additional Products

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:

EtherNet/IP Client/Server Communication Module

MVI71-DFNT

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft Technology distributors near you, go to: www.prosoft-technology.com and select Distributors from the menu.

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