



## DNP 3.0 Server over Ethernet Communication Module

### MVI71-DNPSNET

*With the growing usage of the DNP protocol over Ethernet technology in the industrial marketplace, this product has a wide variety of application uses. Industries that use this technology include:*

- Power and distribution applications
- Petrochemical
- Water and Gas Applications
- SCADA and DCS applications

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+603.7724.2080, asiapc@prosoft-technology.com  
Languages spoken include: Chinese, Japanese, English

#### Europe – Middle East – Africa

+33 (0) 5.34.36.87.20, support.EMEA@prosoft-technology.com  
Languages spoken include: French, English

#### North America

+1.661.716.5100, support@prosoft-technology.com  
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#### Latin America (Sales only)

+1.281.298.9109, latinam@prosoft-technology.com  
Languages spoken include: Spanish, English

#### Brasil

+55-11.5084.5178, eduardo@prosoft-technology.com  
Languages spoken include: Portuguese, English

## DNP 3.0 Server over Ethernet Communication Module

### MVI71-DNPSNET

The MVI71 DNP 3.0 Server over Ethernet Communications Module supports the implementation of the DNP 3.0 (Distributed Network Protocol) over Ethernet, allowing PLC processors to easily communicate with host systems supporting the protocol. The module supports DNP Subset Level 2 features and some Level 3 features.

### Features and Benefits

The MVI71-DNPSNET (Distributed Network Protocol Module over Ethernet) allows Rockwell Automation PLC processors to easily communicate with other DNP protocol-compatible devices.

The module supports DNP subset level 2 features and some Level 3 features. The MVI71-DNPSNET module acts as an input/output module between the DNP Ethernet network and the Rockwell Automation backplane. The data transfer from the PLC processor is asynchronous from the actions on the DNP network. Databases are defined in the module to house the data required by the protocol.

### 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.
- Configuration data obtained from configuration text file downloaded to module. Sample configuration file included.

### 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	0 to 60°C (32 to 140°F)
Storage temperature	-40 to 85°C (-40 to 185°F)
Shock	30g operational 50g non-operational

Specification	Description
Vibration	5 g from 10150 Hz
Relative humidity	5 to 95% (non-condensing)
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

## Functional Specifications

The MVI71-DNPSNET module accepts DNP commands to control and monitor the data stored in the DNP databases. This data is passed between the module and the PLC processor over the backplane for use in user applications.

- DNP databases to house data for the slave port supporting the following maximum input counts
  - Binary input: 8000 points (500 words)
  - Binary output: 8000 points (500 words)
  - Counter: 250 (500 words)
  - Analog input: 500
  - Analog output: 500
- Module memory usage that is completely definable
- Data movement between module using block-transfer or side-connect interface
- Ethernet port supporting both TCP and UDP over Ethernet
- Supports DNP 3.0 in a level 2 implementation
- Supports sending of input event data from the ladder to the module
- Supports time synchronization from/to processor
- Network configurable via text file
- Status and error information

## Additional Products

ProSoft Technology offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms.

Compatible products in the inRAX product line also include:

### IEC 60870-5-104 Server Communication Module for PLC (MVI71-104S)

Visit our web site at <http://www.prosoft-technology.com> for a complete list of products.

## Ordering Information

To order this product, please use the following:

**MVI71-DNPSNET**      DNP 3.0 Server over Ethernet  
Communication Module

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