



## 'C' Programmable Application Development Module with Ethernet

### MVI71-ADMNET

The MVI71-ADMNET module is the ideal solution for many applications where Ethernet and serial connectivity must be added to a PLC platform. Applications using the MVI71-ADMNET module include:

- Bar Code Scanner interface
- Legacy ASCII protocol connections
- Terminal Port Emulation
- Printer Driver (Alarm/Status printer)
- Customized protocol implementations

### How to Contact Us: Sales and Support

All ProSoft Technology products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

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

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+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  
Languages spoken include: English, Spanish

#### 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

## 'C' Programmable Application Development Module with Ethernet

### MVI71-ADMNET

The MVI71 Application Development Module with Ethernet is a PLC backplane compatible module that allows Rockwell Automation PLC processors to interface easily with Ethernet protocol (Explicit Messaging) compatible devices and hosts. Devices commonly supporting the protocol include Rockwell Automation PLCs, and host HMI systems.

### Features and Benefits

The ADMNET solution is a powerful module designed with both Client and Server support. This broad support enables the module to function as a data collection sub-master, or to be a powerful slave as a remote off an HMI host. Applications for the module are found in most industries, especially Manufacturing, Oil and Gas, Electrical Power and Food processing.

The MVI71-ADMNET module is a single slot, backplane compatible solution for the Rockwell Automation PLC platform. This module is a powerful and programmable solution supporting two fully isolated serial ports and one Ethernet port allowing the many field devices to be integrated into the PLC platform.

The MVI71-ADM module has three serial and one Ethernet port, two of the serial ports are isolated for field interfaces

- P1 -- debug/configuration -- RS-232
- P2 -- application -- RS-232, RS-422 or RS-485
- P3 -- application -- RS-232, RS-422 or RS-485
- Ethernet port

### 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.

### 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

Specification	Description
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
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-ADM API Suite allows software developers access to the top layer of the PLC backplane and serial ports. The MVI71-ADMNET API suite accesses the Ethernet port.

Both APIs can be easily used without having detailed knowledge of the module's hardware design. The MVI71-ADMNET API Suite consists the Ethernet Port API. The Ethernet Port API provides access to the Ethernet network. Applications for the MVI71-ADMNET module may be developed using industry-standard DOS programming tools and the appropriate API components.

The MVI71-ADMNET module has three serial ports, two of which are isolated for field interfaces, and one Ethernet port.

- CFG -- debug/configuration -- RS-232
- PRT1 -- Application -- RS-232, RS-422 or RS-485
- PRT2 -- Application -- RS-232, RS-422 or RS-485
- Ethernet Port

PRT1 and PRT2 are jumper configured for direct or Multi-drop field communication. The application program can be written to control the two application ports independently, allowing maximum flexibility in the design.

## General Protocol Specifications

- Allows software developers to access Rockwell Automation backplane and Serial/Ethernet ports without needing detailed knowledge of the module's hardware design
- API library functions are specified using the C programming language syntax
- Supports multi-threaded applications

- The following compiler version is compatible with the MVI module API:
  - Digital Mars C++ 8.49
  - Borland C++ V5.02
- Operating System – General software DOS 6-XL
- Flash ROM program space: 896 KB
- RAM program and data space: 640 KB
- Compact Flash socket: Up to 64 MB

## ADM API Libraries

Each API provides a library of function calls. This library supports any programming language that is compatible with the Pascal calling convention.

- Initialization – Open and close the API
- Debug Port – Debug port user interface
- Database – Read and write data to database
- Timer – Start and check timers
- Backplane – Transfer data over the backplane
- LED – Set user LED indicators
- Flash – Parse configuration files
- Miscellaneous – Configure the console

## 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:

### Generic Ethernet ASCII Interface Module for PLC (MVI71-GEC)

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-ADMNET** 'C' Programmable Application Development Module with Ethernet

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