MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

PROSOFT

MVI46-ADMNET

PROGRAMMABLE ETHERNET COMMUNICATION MODULE

Used with the applicable inRAx MVI46 configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: ProSoft MVI46-ADMNET official datasheet, pp.1 to 2



'C' Programmable Application Development Module with Ethernet

MVI46-ADMNET

The MVI46-ADMNET module is the ideal solution for many applications where Ethernet and serial connectivity must be added to an SLC platform. Applications using the MVI46-ADMNET module:

- *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

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'C' Programmable Application Development Module with Ethernet

MVI46-ADMNET

The MVI46 Application Development Ethernet Communication Module is an SLC backplane compatible module that allows Rockwell Automation SLC processors to interface easily with Ethernet protocol compatible devices and hosts.

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 MVI46-ADMNET module is a single slot, backplane compatible solution for the Rockwell Automation SLC 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 SLC platform with custom user written 'C' code and various APIs supplied for Ethernet, serial and backplane communication.

- The MVI46-ADMNET module has three serial and one Ethernet port, two of the serial ports are isolated for field interfaces
- 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

General Specifications

- Single Slot – 1746 backplane compatible (Local or extended I/O rack only. Remote rack not supported)
- The module is recognized as an Input/Output module and has access to processor memory for data transfer between processor and module using M0/M1 files
- Ladder Logic is used for data transfer between module and processor
- Configuration data obtained through user-defined ladder. Sample ladder file included

Hardware Specifications

Specification	Description
Backplane Current Load	800 ma @ 5V (from backplane)
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	–40 to 85°C (–40 to 185°F)
Relative Humidity	5 to 95% (non-condensing)
Shock	30g operational, 50g non-operational
Vibration	5 g from 10150 Hz
LED indicators	Module status, Backplane transfer status, Application status, Serial activity (debug port), Ethernet link and activity, and error LED status
Debug/Configuration port (CFG)	
CFG Port (CFG)	RJ45 (DB-9M with supplied cable) RS-232 only No hardware handshaking
Configuration Connector	RJ45 RS-232 Connector (RJ45 to DB-9 cable shipped with unit)
Application Ports	
Ethernet Port (Ethernet Modules)	RJ45 Connector Link and activity LED indicators

Functional Specifications

The MVI46-ADM API Suite allows software developers access to the top layer of the SLC backplane and serial ports. The MVI46-ADMNET API suite accesses the Ethernet port and serial ports.

Both APIs can be easily used without having detailed knowledge of the module's hardware design. The Ethernet Port API provides access to the Ethernet network. Applications for the MVI46-ADMNET module may be developed using industry-standard DOS programming tools and the appropriate API components.

The MVI46-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 to communicate with various field devices, without needing detailed knowledge of the module's hardware design
- API library functions are specified using the C programming language syntax
- The following compiler versions are 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: Supports up to 16G Microdrive (not supplied)

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 (MVI46-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:

MVI46-ADMNET 'C' Programmable Application Development Module with Ethernet

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft distributors near you, go to http://www.prosoft-technology.com

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