Siemens S3964R Protocol Communication Module

MVI46-S3964R

The module is ideal in control configurations where there is a need for the SLC controller to exchange data with other non-Rockwell Automation control devices in low speed applications.

The MVI46-S3964R can communicate with or without RK512 devices using two RS-232, RS-422 communication lines (ports). The ports operate independently from each other.

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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MVI46-S3964R

The MVI46 S3964R module from ProSoft Technology allows point-to-point communication between an SLC controller and a partner with S3964R (with or without RK512) communication capability.

Features and Benefits

The S3964R protocol (with or without RK512) was designed by Siemens for bi-directional data communication through a point-to-point connection. It is a master-slave protocol with read and write access. A BCC checksum ensures the safety of the transfer.

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. Sample ladder file included
- Configuration data obtained from configuration text file downloaded to module. Sample configuration 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)
Shock	30g operational, 50g non-operational
Relative Humidity	5 to 95% (non-condensing)
Vibration	5 g from 10150 Hz
LED indicators	Module status, Backplane transfer status, Application status, Serial activity and error LED status
Debug/Configuration port (CFG)	
CFG Port (CFG)	RJ45 (DB-9M with supplied cable) RS-232 only
Configuration Connector	RJ45 RS-232 Connector (RJ45 to DB-9 cable shipped with unit)

Specification	Description
Application Ports	
Application Serial port (PRT1, PRT2) (Serial Modules)	(2) RJ45 RS-232/422/485 Application ports

Functional Specifications

- The MVI46-S3964R and the SLC processor communicate via M0 and M1 files.
- Single-slot, SLC backplane compatible
- Multiple modules can be placed in a rack up to the chassis power supply limit
- While in S3964R with RK512 mode on PRT1 and PRT2, DB-SEND and DB-FETCH instructions can be initiated from the SLC processor or received by the communications partner
- While in S3964R without RK512 mode on PRT1 and PRT2, data can be sent from the SLC processor or be received from the communications partner
- The maximum transfer rate is 512 bytes in any mode
- Data byte swapping can be configured to adjust to a different word format
- While in S3964R with RK512 mode on PRT1 and PRT2, evaluation of the header information DB (data block), DW (data word) and coordination bytes 9 and 10 is possible
- Communication activity and diagnostics are available through LEDs and acknowledgment telegrams
- Example programs are provided for using the S3964R protocol with a Siemens ASM 420 / ASM 424 MOBY-I/E communication interface

Ladder Logic

Ladder logic programming in the SLC processor is required in order to enable and support the Siemens S3964R protocol functionality. The ladder program handles the encoding/decoding of data transferred from the module as well as the initiation of protocol-specific functionality in the module. Example ladder programs are provided with the module to ease the implementation of the module in the user application.

Additional Products

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

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-S3964R	Siemens S3964R Protocol Communication Module

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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