FieldServer Driver - Serial
FS-8700-72 Secutron Modul-R

Devices Supported: Secutron Modul-R
Interface: RS232

Overview
The Secutron Modul-R driver allows the FieldServer to transfer data to and from a client and a server panel on a single point to point network over RS-232 using Secutron Modul-R protocol.

The protocol is strictly command / response with the client polling a server device. A server device can report the set or reset of alarms to the polling client. A server panel consists of 100 circuits, each containing up to 1000 devices. The server and client data arrays for alarm indication are set up as 32-bit unsigned quantities.

Each circuit's alarms are represented by 32 unsigned quantities, which holds 1,024 bits. Only bits 0 to 999 may be used. The last 25 bits may not be used.

There are 3200 unsigned quantities per panel to represent the 100 circuits with 1000 devices per circuit. Each bit of the 32-bits in an unsigned quantity represents an alarm state (1 = alarm, 0 = normal).

A set bit indicates an alarm and the clearing of a bit indicates the reset of an alarm. A panel number is identified by the node id in the configuration files. There can be up to 1000 panels in a system.

Panel, circuit and device numbers range from 0 in messages eg.
Panel numbers – 0 to 999
Circuit numbers – 0 to 99
Device numbers – 0 to 999

Client Configuration File Structure

The client driver is configured with three map descriptors. Each map descriptor must be of a certain "secutron_type". The following types and their functions are defined:

Secutron_type	Map descriptor function
Poller	Polls the Secutron Modul-R at the configured scan interval.
Device	Stores alarm (device) statuses.
Function	Stores the function or type of alarm that was triggered or restored.

The poller map descriptor is responsible for polling the Secutron Modul-R. Alarm statuses are stored by the device map descriptor. Finally, the type or function of the alarm that was stored is indicated and stored by the function map descriptor.

Server Configuration File Structure

The server driver emulates a Secutron Modul-R panel.

The server is configured through the use of two map descriptors:

Secutron_type	Map descriptor function
Device	Stores alarm (device) statuses.
Function	Stores the function or type of alarm that was triggered or restored.

The server driver will respond with alarm statuses from the device map descriptor. The function map descriptor will also return the type or function of the corresponding alarm reported by the device map descriptor.

Revision History

Date	Driver Version	Document Revision	Resp	Comment
12/18/03	1.00	3	JDM	Release