FS-8704-13   **Version: 1.05 / Rev. 1**

1   DESCRIPTION

The GE-SRTP driver allows the FieldServer to transfer data to and from devices over Ethernet using GE-SRTP Driver protocol. Almost all GE automation equipment supports the GE-SRTP protocol when equipped with an Ethernet Port.

The FieldServer can emulate either a Server or Client. The driver, acting as a Client, is capable of reading and writing system memory of any number of remote SRTP capable devices. The FieldServer can scale word data (%AQ, %AI, %R) when acting as a Client.

When configured to act as an SRTP Server, the driver accepts system messages which write to system memory and responds to read requests. When acting as a Server the driver is always at privilege level 4 (allowing it to be written and read).

The driver cannot emulate a Client and Server simultaneously on the same connection to the same IP address.

Driver diagnostics & statistics are exposed in the FieldServer Data Arrays so they may be read and monitored by remote devices / systems.

Write through and port expander modes are supported.
The driver has been timed reading 5700 bytes of table data per second.

The IC697CMM742 Ethernet module supports both GE SRTP and GE EGD.

1.1   Connection Facts

FieldServer Mode	Nodes	Comments
Client	1	Only 1 Client node allowed on Multidrop systems
Server	32	This is the limit per I/Net Panel. The 32 nodes correspond to the maximum of 32 MR's that an I/Net Panel supports.

2   FORMAL DRIVER TYPE

Ethernet

3   COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x30	Yes
SlotServer	No
ProtoNode	No
QuickServer FS-QS-10xx	No
QuickServer FS-QS-12xx	Yes
ProtoCessor FPC-ED2	No
ProtoCessor FPC-ED4	No

4   CONNECTION INFORMATION

Connection type: Ethernet
Ethernet Speeds Supported: 10Base-T, 100Base-T[1]

5   DEVICES TESTED

Device	Tested (FACTORY, SITE)
All GE Ethernet Capable devices - includes Series 90-30, Series 90-70, Versamax and a number of GE Drives.	90-30 CPU 313 with CMM321 (Nov 2001).

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[1] Not all FieldServer models support 100BaseT. Consult the appropriate instruction manual for details of the Ethernet speed supported by specific hardware.

6 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

6.1 Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
%R	Register memory
%AQ	Analog output memory
%Q	Discrete output memory
%M	Discrete momentary memory
%SB	Discrete system memory group B
%S	Discrete system memory
%AI	Analog Input Memory
%I	Discrete input memory
%T	Discrete temporary memory
%SA	Discrete system memory group A
%SC	Discrete system memory group C
%G	Discrete global data table

6.2 Unsupported Functions and Data Types

Function	Reason
Programming messages	FieldServer is a data transfer device, and as such, programming messages are not required
	The driver supports only a limited set of Service Requests and PDU's