1 DESCRIPTION

The GE-EGD (Ethernet Global Data) driver allows the FieldServer to transfer data to and from devices over Ethernet using GE-EGD (Ethernet Global Data) protocol. The FieldServer can emulate either a Server or Client.

GE Fanuc Automation and GE Drive Systems developed an Ethernet Global Data, or EGD, exchange for PLC and computer data in 1998. EGD uses UDP or datagram messages for fast transfer of up to 1400 bytes of data from a producer to one or more consumers. UDP messages have much less overhead than the streaming TCP connection used for programming or CommReq's over SRTP Ethernet. Like Genius® broadcast input or directed control messages, UDP messages are not acknowledged. They can be sent at short intervals. Chances of one or more messages being dropped are small on a local area network.

As a Client the FieldServer acts as an EGD consumer. As a Server the FieldServer acts as an EGD producer.

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

2 FORMAL DRIVER TYPE

Fieldbus

Client or Server

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x2010	Yes
FS-x2011	Yes
FSx25	Yes
FS-x30	Yes
FS-x40	Yes
SlotServer	Yes
ProtoNode	Yes
QuickServer FS-QS-1010	Yes
QuickServer FS-QS-1011	Yes
ProtoCessor FPC-FO2	Yes
ProtoCessor FPC-FD2	Yes

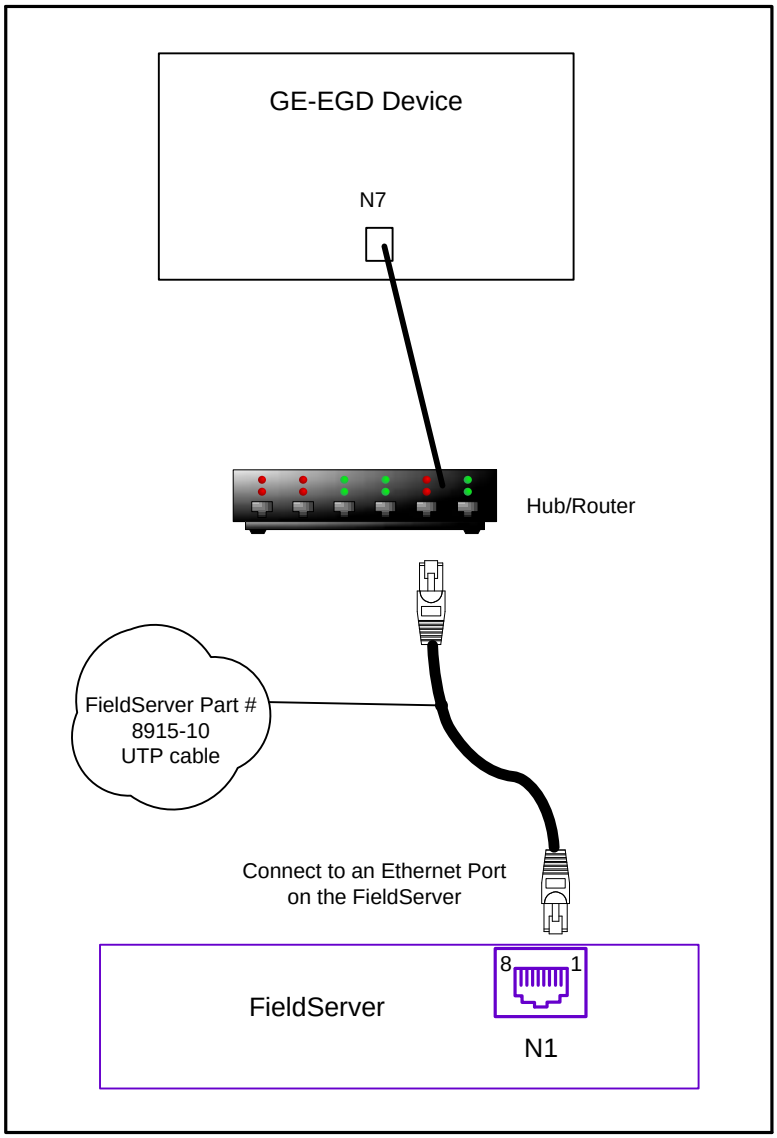
4 CONNECTION INFORMATION

Connection type:	Ethernet
Ethernet Speeds Supported	10Base-T, 100Base-T. Refer to Instruction manual for speed supported by particular FieldServer model.
Multidrop Capability	Yes

5 CONNECTION CONFIGURATIONS

The FieldServer is connected to the Site Ethernet as shown below.

Configure and connect the "GE TCP/IP Ethernet Interface Type 2" according to manufacturer's instructions.



6 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

6.1 Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
Byte	
Bit	(translated as 8bits aligned with a byte boundary)
Word	(unsigned 16bit integer)
Dword	(unsigned 32bit integer)
Int	(signed 16bit integer)
Long	(signed 32bit integer)
Float	(translated as an IEEE 4 byte real number)
Double	(translated as an IEEE 8 byte real number)

6.2 GE Specific Data Types supported

GE Data Type	Description P-ProducerC-Consumer
%R	Register memory in word mode P/C
%AI	Analog input memory in word mode P/C
%AQ	Analog output memory in word mode P/C
%I	Discrete input memory in byte mode P/C
%Q	Discrete output memory in byte mode P/C
%T	Discrete temporary memory in byte mode P/C
%M	Discrete momentary memory in byte mode P/C
%SA	Discrete system memory group A in byte mode P/C
%SB	Discrete system memory group B in byte mode P/C
%SC	Discrete system memory group C in byte mode P/C
%S	Discrete system memory in byte mode P
%G	Discrete global data table in byte mode P/C