

CAS Driver FS8700-108 GE-TLC (GE Total Lighting Control)

Description

This serial driver allows connectivity to a GE-TLC network by providing data transfer to the RLINK device. The RLINK device is provided by GE Lighting Controls as a gateway between its proprietary network and building automation networks. Thus to provide data transfer between a 3rd party protocol such as BACnet, it is necessary to connect the BACnet network to the RLINK by means of a FieldServer.

The driver may be configured as a client or server. The Client functionality is fully documented and supported. The FieldServer cannot be used as a substitute for the RLINK device – for this reason the server side functionality is not documented. If you are interested using the server side please contact the sales group.

As a client the driver is capable of :

- polling for status data,
- sending commands to operate the relays,
- sending commands as if a PSS switch had been operated,
- receiving unsolicited status messages from the TLC network.

The driver can be configured as a **BACnet adapter** – a device which reads a predefined data set and automatically make its available as a set of BACnet data objects. More information is available on request.

The driver can support a simultaneous connection for a PC running TLC configuration software such as WinControl. More information is available on request. This feature has limitations documented in the manual. If you intend to use this feature you must understand the limitations before making your purchase.

Fieldserver Mode	Nodes	Comments
Client	9999	Only one RLINK device may be connected to a single port on the FieldServer. However, each RLINK device may form part of a network of Lighting Panels (nodes). The driver does not limit the number of nodes that may be polled via the RLINK.
Server	N/A	

Formal Driver Type

Serial
Client Only

Compatibility Matrix

FieldServer Model	Compatible with this driver
FS-x2010	Yes
FS-x2011	Yes
FS-x40	Yes
FS-x30	Yes with the limitation that only P2 can be used to connect to a Rlink Device.

Connection Information

Connection type: RS232
The RLINK device self senses the baud rates in this sequence (in this sequence: 300, 19200, 9600, 4800, 2400, 1200.

Baud Rates:
The FieldServer supports all standard baud rates between 300 and 115200

Data Bits: RLINK supports 8, Driver supports 7,8
Stop Bits: RLINK supports 1 Driver supports 1,2
Parity: RLINK supports Even Driver supports Odd, Even, None

Hardware interface: N/A

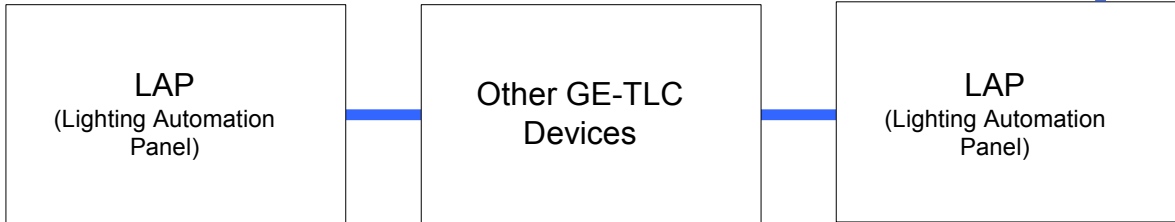
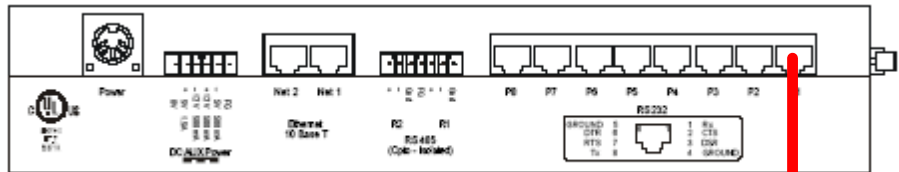
Multidrop Capability No

Devices tested

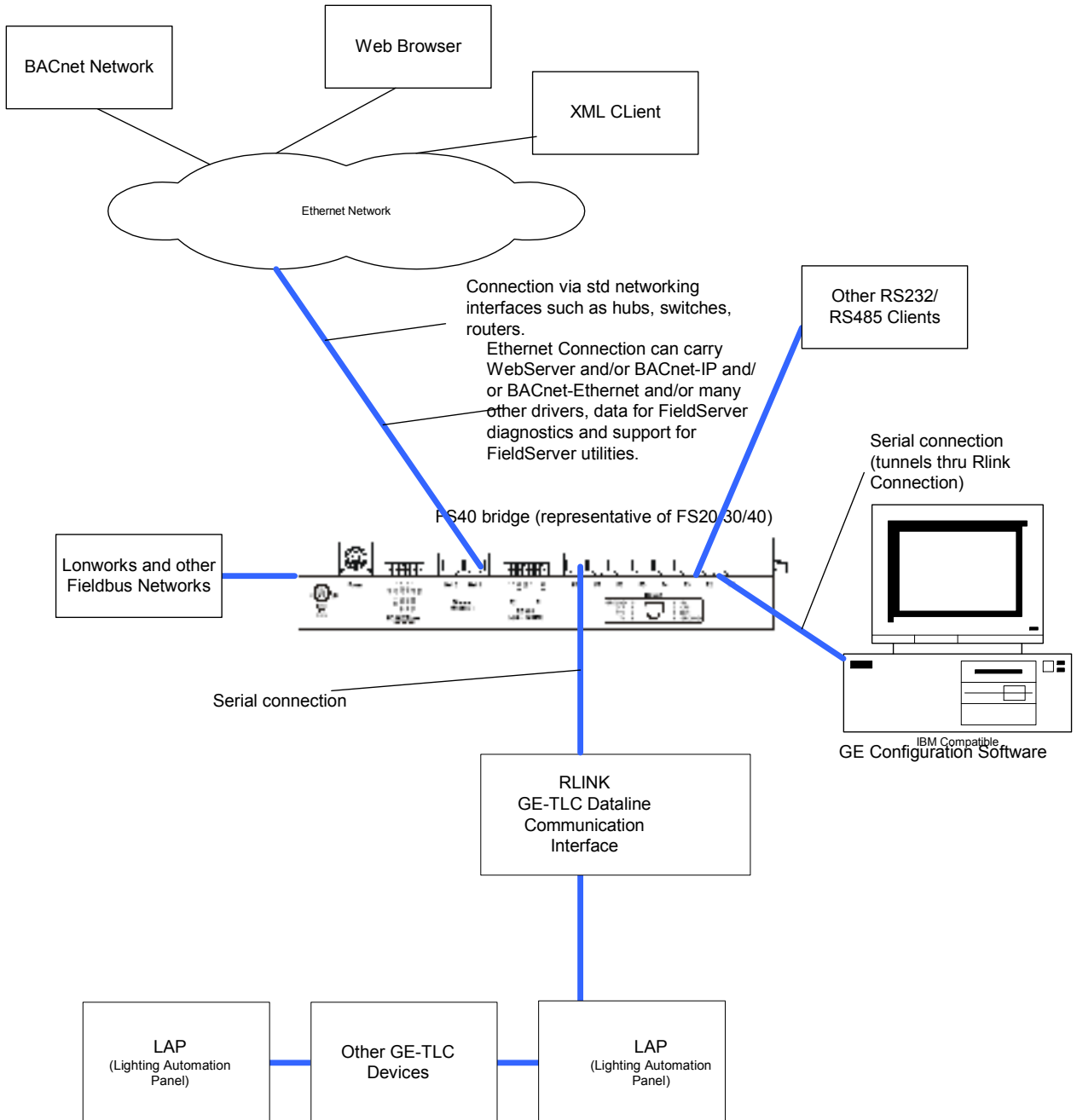
Device	Tested (FACTORY, SITE)
GE TLC Dataline Communication Interface Module. (RLINK)	Factory

Connection configurations

FS40 bridge (representative of FS20/30/40)



Configuration as a Tunnel for the GE Configuration Software



Connection Notes

None

Communications functions - Supported functions at a glance:

Data Types Supported

This driver does not type data.

Read Operations supported

FieldServer as a Client	FieldServer as a Server
Read Relay Status:	N/A
Read Relay Failures	
Read Module Status	
Read Link Status	

Write (Control) Operations supported

FieldServer as a Client	FieldServer as a Server
Override Relay State	N/A
Command Relay Schedule Action	
Command Relay Cleaning Action:	
Command Relay Shed Action	
Initiate PSS action	

Unsolicited Message that are supported

FieldServer as a Client	FieldServer as a Server
Relay status change	N/A
Relay Failure change	
Link Status change	
Module Status change	

Unsupported Functions and Data Types

Function	Reason
It is possible that the RLINK device could send additional unsolicited messages. The published protocol does not identify additional messages but it is possible that future RLINK/TLC network firmware may have additional messages.	

Support

This driver was developed by Chipkin Automation Systems (CAS), a FieldServer Approved Integrator®. CAS are proud to provide support for the driver. For support please call CAS at (866) 636-5400.

Revision History

Date	Resp	Format	Driver Ver.	Doc. Rev.	Comment
10/17/05	PMC	PMC	1.00a	1	Issued for Release
12/28/05	PMC	PMC	1.01h	0	Added X30 and noted limitation on port use.
03/04/06	PMC	PMC	1.01m	0	Added note about tunnel limitation.