

## FieldServer Driver FS8705-10 'MicroSTAR' Serial Driver Suitable for LanStar Replacement

### Description

This driver is used to exchange data between a FieldServer and a 'MicroSTAR' devices. They are also commonly known as 'Barrington MicroSTAR' devices. For this driver to work, the LanStar must be removed as the gateway becomes the master on the trunk of Microstars.

Each device has 4x AO, 4x AI, 4x DI, 4x DO and 4x Counters. The devices can be daisy chained on a RS485 network. Setpoints, virtual Digital Outputs, any virtual points or virtual Microstars all reside in the memory of the LanStar and are not accessible using this driver.

The driver can monitor the status of these points and write to the outputs.

This is an active client driver. The FieldServer is the client. The MicroSTAR devices are the passive servers. The Client sends messages and processes responses from the MicroSTAR's.

The driver is a serial driver using a RS485 serial ports to connect between the FieldServer and the MicroSTAR's. If RS232 ports are used then a converter to RS485 must be used.

The driver is fully compatible with other FieldServer drivers and meets FieldServer's quality assurance standards. The driver was developed by Chipkin Automation Systems, an Approved FieldServer Integrator.

Both Client and Server functionality have been implemented. This means that you can use the driver as a client to monitor/command the devices or you can use it a server to make another type of device appear as if it were a MicroSTAR device. Ie. The server functionality allows you to make a foreign device emulate a MicroSTAR so it can be installed in a MicroSTAR trunk

Fieldserver Mode	Nodes	Comments
Active Client	16	A maximum of 16 devices may be connected per trunk. This is a limitation of the protocol which only allows 16 possible addresses.

### Formal Driver Type

Serial  
Active Client

### Compatibility Matrix

FieldServer Model	Compatible with this driver
FS-x2010-01	Yes,
FS-x2011-01	Yes,
FS-x40	Yes,
FS-X30	Yes
QuickServer's	Any with RS485 port.

### Connection Information

**Connection type:** EIA485

**Baud Rates:** Driver Supports : 110; 300; 600; 1200; 2400; **4800**; **9600**; 19200; 28800; 38400; 57600; 115200 Baud  
*MicroSTAR* supports: 4800

**Data Bits:** Driver Supports : **7,8**  
*MicroSTAR* supports: 8

**Stop Bits:** Driver Supports : **1,2**  
*MicroSTAR* supports: 2

**Parity:** Driver Supports : Odd, **Even**, None  
*MicroSTAR* supports: none

**Hardware interface:** N/A

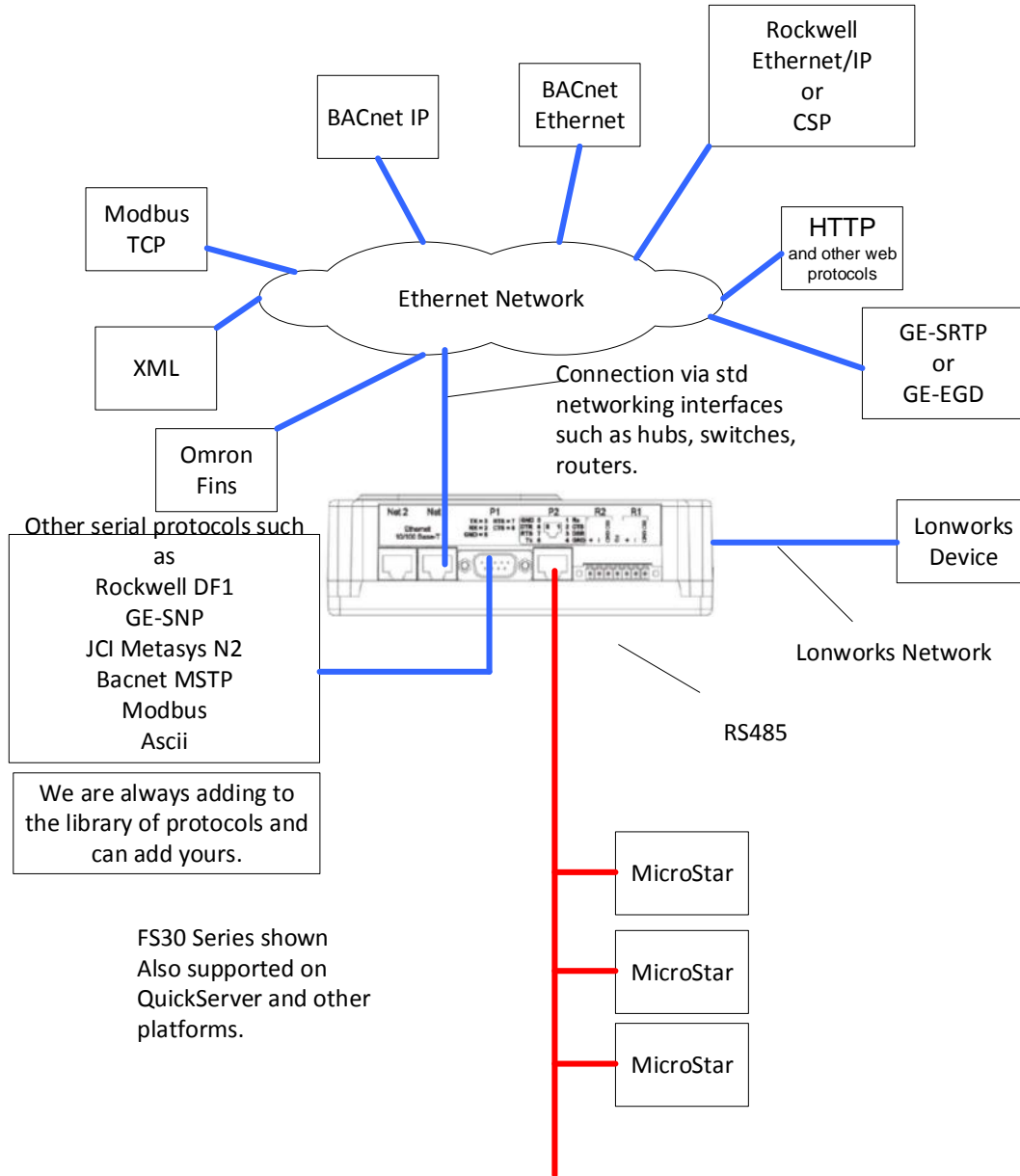
**Multidrop Capability** Yes

### Devices tested

Device	Tested (FACTORY, SITE)
Barrington MicroStar-II Std	Office

**Connection configurations**

FS30 shown as representing FS20, FS30 and FS40



**FS-8705-10 Barrington Microstar Protocol  
(Lanstar Replacement)**

### Communications functions

Function	Notes
Poll Request with Download Data	Writes 4xAO values and 4xDO states. Can also be used to reset one/all of the 4 Counters.
Poll Request	Reads all data for all inputs. Analog inputs are 16 bits values.

### Support

Please contact Chipkin Automation Systems directly for driver support.

The following responses are supported.

### Revision History

Date	Resp	Format	Driver Ver.	Doc. Rev.	Comment
17Aug06	PMC		0.00	0	Created.