



Driver Version: 1.00
Document Revision: 1

FieldServer Driver - Serial

FS8700-96

SMC5000

Description

The SMC5000 driver allows the FieldServer to transfer data to and from devices over either RS232 or RS485 using SMC5000 protocol. The FieldServer can emulate either a Server or Client, although the SMC5000 driver is only available in a Client configuration. Any Server drivers are for FieldServer testing purposes only to emulate a Model 5000 Sentry.

The SMC5000 protocol is used to provide report-by-exception (RBE) capability when communicating with the Sierra Monitor's Model 5000 Sentry. The Sentry always acts as a SMC5000 server node. Changes of critical Sentry registers (e.g. concentrations, alarms, etc.) are thus sent to the Client at a higher frequency than normal registers.

Fieldserver Mode	Nodes	Comments
Client	1	Only 1 client node allowed on Multidrop systems
Server	255	A maximum of 255 nodes can be connected on a multidrop network, although a system performance penalty is paid as more nodes are added. In non-multidrop systems only 1 server node is allowed.

Formal Driver Type

Client or Server

Compatibility Matrix

FieldServer Model	Compatible with this driver
FS-x2010	Yes
FS-x2011	Yes
FS-x40	Yes
FS-x30	No

Connection Information

Connection type: EIA232 or EIA485 (Two wire, Half-Duplex)

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

Data Bits: 7,8

Stop Bits: 1,2

Parity: Odd, Even, None

Multidrop Capability: Yes



Proprietary Physical Interfaces Supported

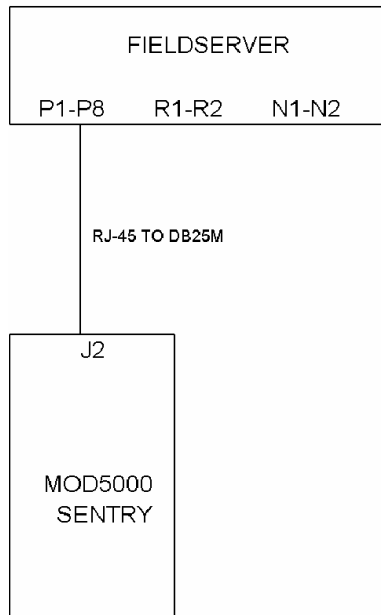
Fieldserver Model	Adapter Model #	Vendor	Physical Medium

Devices tested

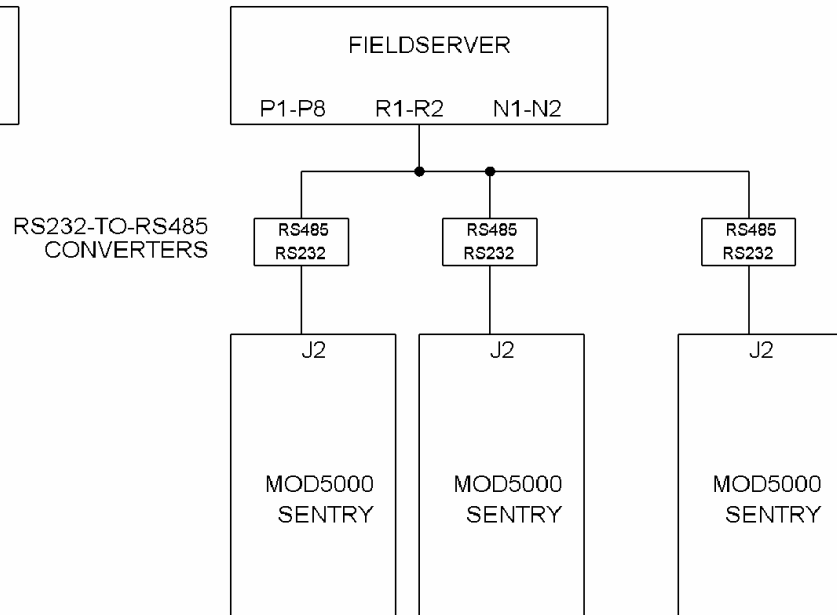
Device	Tested (FACTORY, SITE)
Model5000 Sentry	Factory

Connection configurations

NON-MULTIDROP SYSTEM



MULTIDROP SYSTEM



Connection Notes

Consult the relevant Sierra Monitor Model 5000 Sentry documentation for the correct connection parameters, such as baudrate, parity, etc.



Communications functions - Supported functions at a glance:

Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
Analog Input	16-bit Register type
Digital Input	16-bit Register type
Analog Register	16-bit Register type
Digital Register	16-bit Register type
Analog Output	16-bit Register type
Digital Output	16-bit Register type

Read Operations supported

FieldServer as a Client	FieldServer as a Server
Read Register (all data types):	Provide Register Status (all data types):
Direct read, change-of-state (COS) read	Direct read, change-of-state (COS) read

Write (Control) Operations supported

FieldServer as a Client	FieldServer as a Server
Write Register (all data types):	Accept Register Status (all data types):
Direct writes	Direct writes

Unsupported Functions and Data Types

Function	Reason
Programming messages	FieldServer is a data transfer device, and as such, programming messages are not required



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