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A Sierra Monitor Company

**Driver Manual**  
**(Supplement to the FieldServer Instruction**  
**Manual)**

**FS-8700-34 SMC 2460**

**APPLICABILITY & EFFECTIVITY**

**Effective for all systems manufactured after May 1, 2001**

Instruction Manual Part Number FS-8700-34

Version: N/A

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## 1. SMC 2460 Description

The SMC 2460 driver allows the FieldServer to transfer data to and from devices over either RS-232 or RS-485 using SMC 2460 protocol from Sierra Monitor Corporation. The FieldServer acts as the Client.

The information that follows describes how to expand upon the factory defaults provided in the configuration files included with the FieldServer.

### 1.1 Hardware/Software

**Supplied by FieldServer Technologies.**

FieldServer Technologies PART #	DESCRIPTION
FS-8915-10	UTP cable (7 foot) for Ethernet connection
FS-8915-10	UTP cable (7 foot) for RS-232 use
FS-8917-01	RJ45 to DB25M connection adapter

**Provided by user**

PART #	DESCRIPTION
	SMC 2460 Panel.

## 2. FieldServer as a SMC 2460 Client

### 2.1 Hardware Connections

CONFIGURE THE SMC2460 ACCORDING TO SIERRA MONITOR'S INSTRUCTIONS

### 2.2 Configuration File Structure

The following tables describe parameters that need to be filled out in the configuration file. For convenience, a few example parameters already exist in the supplied PRIMSERV.CSV .

Note that \* indicates an optional parameter, with the bold legal value being the default.

#### 2.2.1 Data Arrays

Section Title		
Data_Arrays		
Column Title	Function	Legal Values
Data_Array_Name	Provide name for Data Array	Up to 15 alphanumeric characters
Data_Format	Provides data format	UINT16, UINT32, SINT16, SINT32, BIT, FLOAT
Data_Array_Length	Number of Data Objects	1-10,000

#### Example

```
// Data Arrays
//
Data_Arrays
Data_Array_Name,      Data_Format,      Length,
DA_AI_01,             Float,            200,
DA_AO_01,             Float,            200,
DA_DI_01,             Bit,              200,
DA_DO_01,             Bit,              200,
```

## 2.2.2 Client Side Connections

Section Title		
Connections		
Column Title	Function	Legal Values
Port	Specify which port the device is connected to the FieldServer	P1-P8, R1-R2
Baud	Specify baud rate	9600
Timeout	Specify maximum allowed poll response time.	>21.0s
IC_Timeout	Specify maximum allowed inter-character delay.	>20.0s
Protocol	Specify driver protocol	D2460

### Example

```
// Client Side Connections
//
Connections
Port,      Baud,      Timeout,      IC_Timeout,      Protocol
P8,       9600,      25.0s,      20.0s,          D2460
```

**2.2.3 Client Side Nodes**

SectionTitle		
Nodes		
Column Title	Function	Legal Values
Node_Name	Provide name for node	Up to 32 alphanumeric characters
Node_ID	Node ID of physical server node (PLC or Slave Device)	1-255
Protocol	Specify driver protocol	D2460
Port	Specify which port the device is connected to the FieldServer	P1-P8, R1-R2
Timeout	Specify maximum allowed poll response time	>21.0s

**Example**

```
// Client Side Nodes
//
Nodes
Node_name,      Node_ID,      Protocol,      Port,      Timeout
DEV1,          1,          D2460,        P8,        21.0s
```

**2.2.4 Client Map Descriptors**

<b>Section Title</b>		
Map_Descriptors		
<b>Column Title</b>	<b>Function</b>	<b>Legal Values</b>
Map_Descriptor_Name	Name of this Map Descriptor	Up to 32 alphanumeric characters
Data_Array_Name	Name of Data Array where data is to be stored in the FieldServer	One of the Data Array names from "Data Array" section above
Data_Array_Offset	Starting location in Data Array	0 to maximum specified in "Data Array" section above
Function	Function of Client Map Descriptor	RDBC, WRBC, WRBX
Node_Name	Name of Node to fetch data from	One of the node names specified in "Client Node Descriptor" above
Data_Type	Data type	Ana_Input, Ana_Output, Dig_Input, Dig_Output
Address	Starting address of read block	1-48
Length	Length of Map Descriptor	1-48
Block_Number	Specify block number in SMC 2460	0

```
// Client Side Map Descriptors
//
// D2460 Map Descriptors
//
Map_Descriptors
Map_Descriptor_Name,      Data_Array_Name,  Data_Array_Offset,  Function,  Data_type,  node_name,  Address,  Length
CMD_D2460_AI1,           DA_AI_01,         1,                  RDBC,     ana_input,  DEV1,       1,        48
CMD_D2460_DI1,           DA_DI_01,         1,                  RDBC,     dig_input,  DEV1,       1,        48
CMD_D2460_DO1,           DA_DO_01,         1,                  RDBC,     dig_output, DEV1,       1,        48
CMD_D2460_AO1,           DA_AO_01,         1,                  RDBC,     register,   DEV1,       1,        48
```

### 2.3 FieldServer as a SMC 2460 Server

Due to the nature of the device that this driver supports, the FieldServer will only ever function as a client.



**3. Revision History**

Date	Driver Version	Document Revision	Resp	Comment
8/26/03	N/a	1.00	JD	Releasing