

1 DESCRIPTION

The 'Setra Model 370 Digital Pressure Gage' driver allows the FieldServer to transfer data to and from devices over either RS-232 or RS-485 using the 'Setra Model 370 Digital Pressure Gage' protocol. The FieldServer can emulate either a Server or Client.

The driver implements a subset of the commands and responses that an actual Setra Model 370 Digital Pressure Gage is capable of. Thus the driver permits the transfer of current pressure information, gauge status information and the processing of gage verification information.

The driver is capable of providing active Client and passive Server support. An active Client is one that polls for data and processes responses, it is not capable of processing unsolicited messages from the remote device. A passive Server can respond to polls but is not capable of sending unsolicited messages reporting change of state or other information.

When configured as a Client it is important the digital gage is configured correctly and that it is left in an operational mode where it can respond easily to the commands sent to it. If a user were to operate the gage from its front panel and leave it in a configuration state, awaiting input from a user, then the gage would be incapable of responding to commands from the FieldServer. The driver cannot write to the digital gage. Thus alarm set points and other configuration tasks cannot be performed using a FieldServer.

1.1 Connection Facts

FieldServer Mode	Nodes	Comments
Client	1	This is a node-less protocol. One Client per FieldServer port
Server	1	This is a node-less protocol. One Client per FieldServer port

2 FORMAL DRIVER TYPE

Serial
Client or Server

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x30	Yes
SlotServer	No
ProtoNode	No
QuickServer FS-QS-10xx	No
QuickServer FS-QS-12xx	No
ProtoCessor FPC-ED2	No
ProtoCessor FPC-ED4	No

4 CONNECTION INFORMATION

Connection type: RS-232

Baud Rates: Vendor Device Supports: 300, 600, 1200, 1800, 2400, 3600, 4800 or 9600. Default is 2400.

Data Bits: Driver Supports: 110; 300; 600; 1200; 2400; 4800; 9600; 19200; 28800; 38400; 57600; Vendor Supports: 8

Stop Bits: Driver Supports: 7,8; Vendor supports: 1

Parity: Driver supports: 1,2; Vendor Supports: None; Driver Supports: Odd, Even, None

Multidrop Capability: No

5 DEVICES TESTED

Device	Tested (FACTORY, SITE)
Setra	Factory

6 COMMUNICATIONS FUNCTIONS – SUPPORTED FUNCTIONS AT A GLANCE

The following table lists the commands that have been implemented.

Command	Code	Implemented
P – Immediate Print of Pressure Reading	P	Yes
SP – Status Print	SP	Yes
V – Verification String	V	Yes
All others		No

6.1 Data Types Supported

The protocol offers no explicit supplier for data types. They are not relevant to this driver.

6.2 Read Operations Supported

The read operations supported are listed above

6.3 Connection Notes

This driver cannot be used to write to the pressure gage

6.4 Connection Notes

Only three commands have been implemented. See the list above. Other commands can be added at a customer’s request. Please contact sales.