

1 DESCRIPTION

The Point Six Wireless Driver allows the FieldServer to record data from Point Six wireless sensors over Ethernet using protocol as per “ExtendedPointSensorPacketSpec.pdf” (1/19/2010) and “PointSensorPacketSpecs.doc”.

The Driver acts as a Passive Client. This means that the driver will not send any polls or requests for information. It will listen for UDP packets addressed to itself at a configurable port (default port is 6767). Point Six Wireless sensors should be configured to send data messages to the FieldServer’s IP address and port.

The Driver supports command2 (data) packets of 75 bytes from Point Six wireless sensors. Sensor Types supported are listed in Section 7.2

The Driver acknowledges diagnostic command5 packets of 75 bytes from the Point Sensor Utility, but does not process them further to decode or store any data.

Max Nodes Supported

FieldServer Mode	Nodes	Comments
Client	Multiple	The FieldServer can communicate with multiple Point6 wireless devices.
Server	-	The FieldServer cannot emulate a Point6 Wireless Sensor. The Server side is implemented only to test the Client side of the Driver.

2 FORMAL DRIVER TYPE

Ethernet

Passive Client

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x2010	Yes
FS-x2011	Yes
FSx25	No
FS-x30	Yes
FS-x40	Yes
SlotServer	No
ProtoCessor FFP-FO2	No
ProtoNode	No
ProtoCessor FFP- FD2	No
QuickServer	Yes

4 CONNECTION INFORMATION

Connection type: Ethernet
Ethernet Speeds Supported 10Base-T, 100Base-T¹

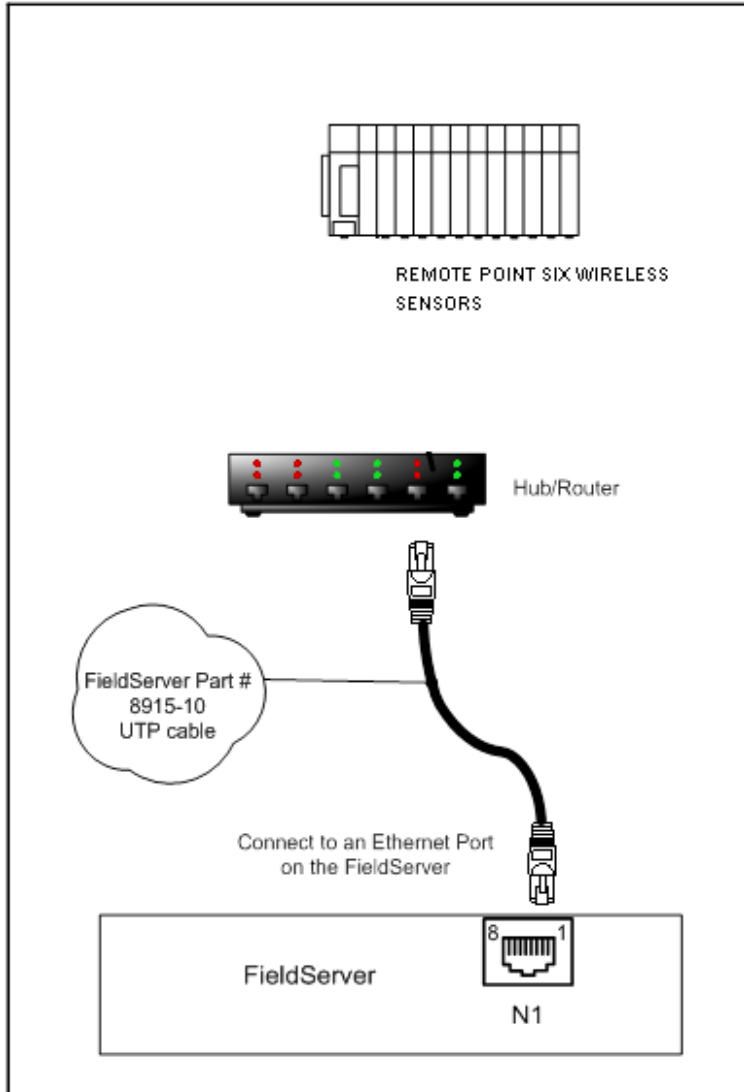
5 DEVICES TESTED

Device	Tested (Factory, Site)
Point Six RTD (Dual Analog) Sensor	Factory
Point Six Humidity/Temperature (Humidity2) Sensor	Factory

¹ Not all FieldServer models support 100BaseT. Consult the appropriate instruction manual for details of the Ethernet speed supported by specific hardware.

6 CONNECTION CONFIGURATIONS

The FieldServer is connected to the generic Router/Switch as shown in the connection drawing.



Configure the network devices according to the manufacturer's instructions

6.1 Connection Notes

- Point Six sensors are wireless, therefore a wireless-to-wired Ethernet connection to the FieldServer needs to be set up.
- Point Six Wireless sensors should be configured to send data messages to FieldServer's IP address and port.

7 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

7.1 Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
Analog Input	Temperature, Humidity or generic analogs
Digital Input	Alarms (low, high, battery low etc)

7.2 Read Operations supported

The Driver extracts and stores data for different sensors as follows:

7.2.1 Data Stored Per Sensor Type

Sensor Type	I/O 1	I/O 2	Units for I/O 1	Units for I/O 2
Humidity2 (Id 52/51)	temperature (DegC)	humidity (%RH)	-	-
Temp (Id 54/51)	temperature (DegC)	-	-	-
Dual Analog (Id 76/75)	Analog1	Analog2	Enumerated Eng. Units for Analog1 (0, 50, 58-63)	Enumerated Eng. Units for Analog2 (0, 50, 58-63)

7.2.2 Data Stored for all Supported Sensors

Transmissions	Alarms	Status
Max Transmissions	I/O 1 – low alarm	Sensor has been configured via USB Programmer cable.
Period - Transmit period in seconds	I/O 1 – high alarm	Data Logging capability
	I/O 2 – low alarm	Battery Low
	I/O 2 – high alarm	Alarm in the data log.
	I/O 1 – low alarm reset	Running on line power
	I/O 1 – high alarm reset	
	I/O 2 – low alarm reset	
	I/O 2 – high alarm reset	

7.3 Write (Control) Operations supported

This is a Passive Client Driver - it listens for messages from remote devices, but does not send any read/write requests

7.4 Unsupported Functions and Data Types

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

7.5 Functions Described

- The Driver only processes packets of 75 bytes; all other packets are discarded.
- The Driver acknowledges command 5 packets but does not process them further, so no data is stored.
- The Driver acknowledges command 2 packets, processes and stores data from packets.

7.6 Unsupported Devices or Protocol Options

- The Driver supports the devices listed in Section 7.2.1 only, no other devices are supported.
- The Driver supports packets for commands 2 and 5 only. No other commands are supported.