1 DESCRIPTION

The FieldServer Profibus DP Slave driver can be used to emulate a single slave station on a Profibus network. DP Masters can open a connection of up to 244 Bytes of Input and 244 Bytes of Output data, but not exceeding a combined total of 416 Bytes to the FieldServer. The FieldServer can be added to the Profibus network with the use of the supplied GSD file for the ANYBUS™ card. Connection to the Profibus network is via a DB9 port on the ANYBUS™ card.

Fieldserver Mode	Nodes	Comments
Server	1	The FieldServer can only emulate one Profibus DP Slave station

2 FORMAL DRIVER TYPE

Fieldbus
Server Only

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x2010	No
FS-x2011	No
FSx25	No
FS-x30	No
FS-x40	No
SlotServer	No
ProtoCessor	No
ProtoNode	No
FS-B3512	Yes

4 CONNECTION INFORMATION

Connection type: Proprietary
Baud Rates: 9.6k, 19.2k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12Mbit/s. Driver is auto-sensing.
Hardware interface: Anybus-S Profibus DP

## 5 PROPRIETARY PHYSICAL INTERFACES SUPPORTED

Fieldserver Model	Adapter Model #	Vendor	Physical Medium
FS-B3512	Anybus-S Profibus DP	HMS Networks	Twisted pair

6 DEVICES TESTED

Device	Tested (FACTORY, SITE)
SST-5136-PFB-ISA	FieldServer Technologies

FieldServer Technologies 1991 Tarob Court Milpitas, California 95035 USA   **Web**: www.fieldserver.com
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7   CONNECTION CONFIGURATIONS

The FieldServer is connected to the Profibus network and NetTool as shown in the connection drawing below.
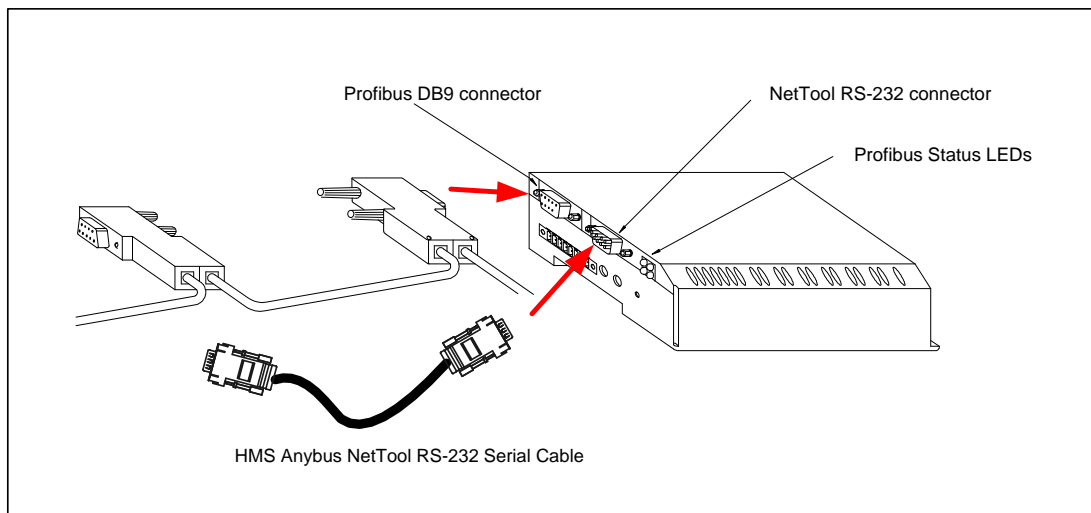
Profibus DB9 Connector Pinouts

Pin	Name	Description
Housing	Shield	Connected to PE
1	Not connected	-
2	Not connected	-
3	B-Line	Positive RxD/TxD according to RS-485 specification
4	RTS[1]	Request to Send
5	GND BUS[2]	Isolated GND from RS-485 side
6	+5V BUS2	Isolated +5V from RS-485 side
7	Not connected	-
8	A-Line	Negative RxD/TxD according to RS-485 specification
9	Not connected	-

Only A-line, B-line and Shield are used for most applications.

Profibus NetTool connector Pinouts

PC Side DB9 Female	FieldServer Side DB9 Female
2	3
3	2
5	5

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[1] Used in some equipment to determine the direction of transmission.
[2] Used for bus termination. Some devices, e.g. optical transceivers (RS-485 to fiber optics) require an external power supply from these pins.

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7.1 Connection Notes

Use the recommended network cable and terminators as specified by the Profibus network organization and/or the manufacturer of your network equipment.

Recommended cable is shielded copper cable.

8 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

8.1 Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
2-byte Integer (Signed and Unsigned)	Buffer arranged as WORDS
8-bit Byte	Buffer arranged as BYTES
4-byte Float	Buffer arranged as FLOATS
Bit	Buffer arranged as BYTES

9 DATA OPERATIONS SUPPORTED

FieldServer as a Profibus Slave
Accept Output Buffer Data from a Profibus DP Master
Provide Input Buffer Data to a Profibus DP Master

10 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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