

FieldServer Driver - Fieldbus FS-8700-113 Profibus X30 DP Slave Driver

Description

The FieldServer Profibus X30 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 |

Formal Driver Type

Fieldbus
Server Only

Compatibility Matrix

| FieldServer Model | Compatible with this driver |
|-------------------|-----------------------------|
| FS-x2010 | No |
| FS-x2011 | No |
| FS-x40 | No |
| FS-B3512 | Yes |

Connection Information

Connection type: Proprietary
Baud Rates: 9.6k, 19.2k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M bit/s
Hardware interface: Anybus-S Profibus DP

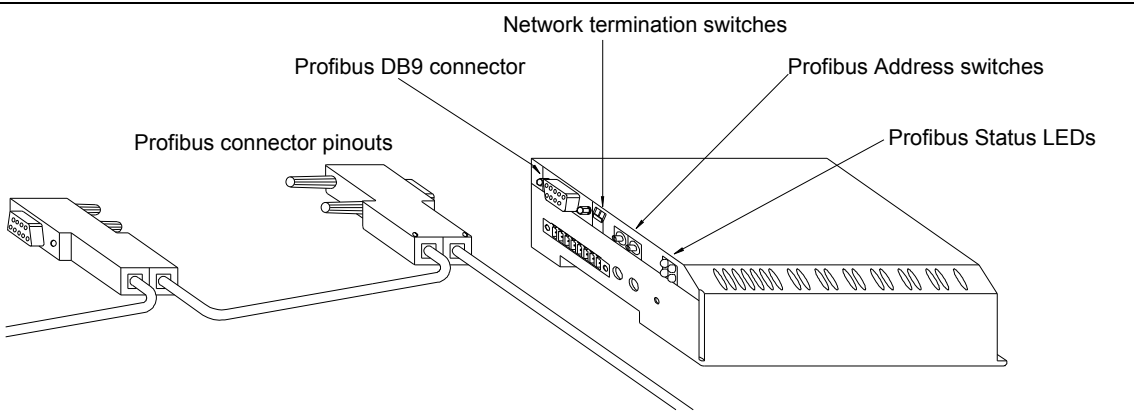
Proprietary Physical Interfaces Supported

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

Devices tested

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

Connection configurations



| 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 | Request To Send* |
| 5 | GND BUS | Isolated GND from RS 485 side* |
| 6 | +5 V BUS | Isolated +5 V from RS 485 side* |
| 7 | Not connected | - |
| 8 | A-Line | Negative RxD/TxD according to RS 485 specification |
| 9 | Not connected | - |

* +5V BUS and GND BUS are used for bus termination. Some devices, like optical transceivers (RS485 to fibre optics) might require external power supply from these pins. RTS is used in some equipment to determine the direction of transmission. In normal applications only A-Line, B-Line and Shield are used.

Connection Notes

Recommended cable is shielded copper cable.

Communications functions - Supported functions at a glance:

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 |

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 |

Unsupported Functions and Data Types

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