Driver Version:	**1.00**
Document Revision:	**1**

FieldServer Driver - Fieldbus
FS–8700–22
X30 DeviceNet Slave Adapter Driver

Description

The X30 DeviceNet Slave Adapter driver can be used to emulate a single slave station on a DeviceNet network. The FieldServer DeviceNet adapter is implemented as an ODVA profile 12 communications adapter and acts as a group 2 only server on the DeviceNet network. Standard DeviceNet baudrates of 125k, 250k and 500kbit/s are supported. DeviceNet masters/scanners can open an IO connection of up to 512 Bytes in each direction to the FieldServer.

Fieldserver Mode	Nodes	Comments
Server	1	The FieldServer can only emulate one DeviceNet 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-x30	Yes

Connection Information

Connection type: Proprietary
Baud Rates: 125k, 250k, 500kbit/s
Hardware interface: Anybus-S DeviceNet

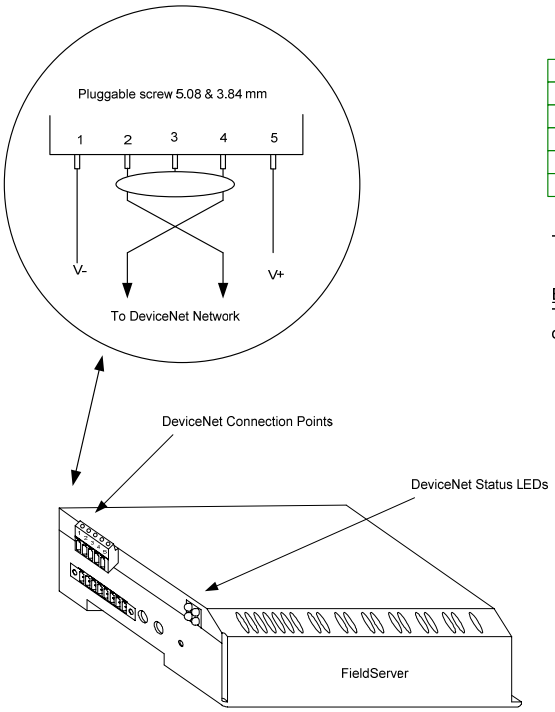
Proprietary Physical Interfaces Supported

Fieldserver Model	Adapter Model #	Vendor	Physical Medium
FS-x30	Anybus-S DeviceNet	HMS Networks	Twisted pair

Devices tested

Device	Tested (FACTORY, SITE)
Allen Bradley 1756-DNB B	FieldServer Technologies

Connection configurations



Connector Pinouts

Pin	Signal	Description
1	V-	Negative supply voltage
2	CAN_L	CAN_L bus line
3	SHIELD	Cable Shield
4	CAN_H	CAN_H bus line
5	V+	Positive supply voltage

Terminate each end of the DeviceNet Network with a 121 Ω restrictor.

Bus
The bus interface shall be supplied with 24DC +/- 10% on the fieldbus connector.

FieldServer Technologies (408)-262-2299

X30 DEVICENET SLAVE ADAPTER
FIELDSERVER
CONNECTION DIAGRAM

BASE NAME:
FILE NAME: FS-8700-22.VSD
DATE: 3/22/07
BY: MC

Connection Notes

Refer to DeviceNet cabling requirements.

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 Double Words	Buffer arranged as DWORDS
4-byte Float	Buffer arranged as FLOAT
Bit	Buffer arranged as BYTES

Note: The IO buffers can be arranged with mixed data-types as needed.

Data Operations supported

FieldServer as a DeviceNet Slave
Accept Output Buffer Data from a DeviceNet Master (Scanner)
Provide Input Buffer Data to a DeviceNet Master (Scanner)

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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