DeviceNet Master

Description

The DeviceNet Master Adapter driver can be used to emulate a single Master Scanner station on a DeviceNet network. The FieldServer DeviceNet adapter is implemented as an ODVA profile 12 communications adapter. Standard DeviceNet baud rates of 125k, 250k and 500kbit/s are supported. The DeviceNet Master Scanner can open IO connections of up to a total of 1536 Bytes in each direction to DeviceNet Slaves. The Driver can handle up to 63 Slaves since one of the station addresses needs to be assigned to the Master itself.

Connection Facts

FieldServer Mode	Nodes	Comments
Client	1	The FieldServer can only emulate one DeviceNet Master station
Server	63	The driver can communicate with up to 63 Slaves as long as the FieldServer point count license is not exceeded

Formal Driver Type

Fieldbus, Client only

Compatibility

FieldServer Model	Compatible	FieldServer Model	Compatible
ProtoCessor	No	QuickServer FS-QS-10xx	No
ProtoCarrier	No	QuickServer FS-QS-12xx	No
ProtoNode	No	QuickServer FS-QS-20xx	No
ProtoAir	No	QuickServer FS-QS-22xx	No
FS-B35 Series	Yes		

Connection Information

Connection Type: Proprietary

Baud Rates: 125k, 250k, 500kbit/s

Hardware Interface: Anybus-M DeviceNet

3rd Party Equipment: HSM NetTool for DeviceNet

Proprietary Physical Interfaces Supported

FieldServer Model	Adapter Model #	Vendor	Physical Medium
FS-B35	Anybus-M DeviceNet	HMS Networks	Twisted pair

Devices Tested

Device	Tested (Factory, Site)
Allen Bradley 1756-DNB B	Factory
Anybus-S DeviceNet	Factory

Communication Functions

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
2-byte Integer (Signed and Unsigned)	Buffer arranged as WORDS

Data Operations Supported

FieldServer as a DeviceNet Master
Accept Output Buffer Data from DeviceNet Slaves
Provide Input Buffer Data to DeviceNet Slaves

Unsupported Functions and Data Types

Function	Reason
Programming messages	FieldServer is a data transfer device, and as such, programming messages are not required
Explicit messaging (get and set attribute) for parameter data. Parameter data has to be mapped to IO data if it needs to be accessed.	To be developed