



FieldServer Protocol Driver Sheet

Allen Bradley DF1, Full Duplex and Half Duplex

FS-8700-03

Version: 1.02 / Rev. 1.C

1 DESCRIPTION

The DF1 driver allows the FieldServer to transfer data to and from devices over RS-232 using DF1 protocol. The FieldServer can emulate either a Server or Client.

1.1 Connection Facts

FieldServer Mode	Nodes	Comments
Maximum remote Nodes the driver Client can connect to	1	Only one client per port
Maximum remote Nodes that can connect to the Driver Server	1	Only one client per port
Maximum local Client nodes the driver can emulate on one platform	254	Acting as single client to remote gateway
Maximum local Server Nodes the Driver can emulate on one platform	254	Acting as gateway to virtual nodes
Capable of Emulating local Server and Client at the same time?	Yes	

2 FORMAL DRIVER TYPE

Serial

Client or Server

3 COMPATIBILITY

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

4 CONNECTION INFORMATION

Connection Type: RS-232 Half-Duplex/ Full Duplex
 Baud Rates: 300 to 115200; 9600 (Vendor limitation)
 Data Bits: 8 (Vendor limitation)
 Stop Bits: 1,2
 Parity: Odd, Even, None
 Multidrop Capability: Yes , No
 Error Checking: CRC, BCC (BCC recommended)

5 DEVICES TESTED

Device	Tested (FACTORY, SITE)
SLC 5/01	Factory
SLC 5/02	Factory
SLC 5/03	Factory
SLC 5/04	Factory
PLC 3	Site
PLC 5	Site

6 COMMUNICATIONS FUNCTIONS

6.1 Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
I	Input
O	Output
B	Bit
N	Integer
C	Counter
T	Timer
S	System Status
St	String
F	Float

6.2 Command Support

The following commands are supported by the FieldServer for the various PLC types.

PLC Type	File Type	FNC	Read	FNC	Write	Typical Command
PLC 3	N	1	Range Read	0	Range Write	N7: 3, L5
	F	1	Range Read	0	Range Write	F12: 3 L5
	B	1	Range Read	2	Bit Write	B3/4: 5 L5
PLC 5	N	1	Range Read	0	Range Write	N7: 3, L5
	F	1	Range Read	67	Typed Write	F12: 3 L5
	B	1	Range Read	26	Read Modify Write	B3/4: 5 L5
SLC5	N	A2	Protected Typed Logical Read	AA	Protected Typed Logical Write	N7: 3, L5
	F	A2	Protected Typed Logical Read	AA	Protected Typed Logical Write	B3/4: 5 L7
	B	A2	Protected Typed Logical Read	AB	Protected Typed Logical Write	B3/4: 5 L8
	I	A2	Protected Typed Logical Read	-	-	I: 13, L5
	O	A2	Protected Typed Logical Read	-	-	O: 13, L5

6.3 Unsupported Functions and Data Types

Function	Reason
Programming messages	FieldServer is a data transfer device, thus programming messages are not required