

1 DESCRIPTION

The FieldServer SDD16 driver is used to communicate with a digital I/O module model 485SDD16. The current driver only supports reading the status of all sixteen digital input lines. The SDD16 driver in conjunction with the 485SDD16 module allows the FieldServer to sense external On/Off conditions and to control a variety of devices.

The SDD16 driver makes use of the data complement mode feature of the 485SDD16 module. In data complement mode the driver and module communicates with double the amount of data bytes to enable better error detection in noisy electrical environments.

The driver is only available as a client. Server drivers are for FieldServer testing purposes only.

2 FORMAL DRIVER TYPE

Serial

Client

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-x30	No
SlotServer	No
ProtoNode	No
QuickServer FS-QS-10xx	No
QuickServer FS-QS-12xx	No
ProtoCessor FPC-ED2	No
ProtoCessor FPC-ED4	No

4 CONNECTION INFORMATION

Connection type: RS-485 (Two wire, Half-Duplex)
 Baud Rates: 1200; 2400; 4800; 9600
 Data Bits: 8
 Stop Bits: 1
 Parity: None
 Multidrop Capability: Yes

5 DEVICES TESTED

Device	Tested (FACTORY, SITE)
485SDD16	FACTORY

6 COMMUNICATIONS FUNCTIONS – SUPPORTED FUNCTIONS AT A GLANCE

6.1 Data Types supported

FieldServer Data Type	Description (or Device Data Type)
Digital Input	Digital Input Line

6.2 Read Operations Supported

FieldServer as a Client
Read Binary Status:
Read the binary state of all digital input lines

6.3 Unsupported Functions and Data Types

Function	Reason
Read Digital Outputs	In development
Set Digital Outputs	In development
Program I/O lines direction as Input or Output	In development
Program Turnaround Delay	In development
Program Digital Output Lines'	In development
Powerup States	In development

6.4 Limitations

Limitation	Reason
Only one 485SDD16 module on a RS-485 line may be used	The addition of extra devices up to 256 devices are in development