

1 DESCRIPTION

Modbus Daniels is an inclusion into Modbus ASCII, allowing floats to be used. Modbus Daniels is designed to support floats in the address range 7000 to 7999. The "Double" data type is not supported. Other standard Modbus data types are supported. The FieldServer can only emulate a client.

The driver was developed for Modbus Application Protocol Specification V1.1a" from Modbus-IDA. The specification can be found at www.modbus.org.

1.1 Connection Facts

FieldServer Mode	Nodes	Comments
Maximum remote Nodes the driver Client can connect to	255	Only one client per port. The achievable number of devices may be limited due to device loading and network speed characteristics
Maximum local Client nodes the driver can emulate on one platform	1	Only one client node allowed on multidrop systems
Capable of Emulating local Server and Client at the same time?	No	

2 FORMAL DRIVER TYPE

Serial
Client Only

3 COMPATIBILITY

FieldServer Model	Compatible
FS-B35 Series	No
ProtoNode/ProtoAir	No
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 or RS-485
(Two wire, Half-Duplex)

Baud Rates: 110; 300; 600; 1200; 2400; 4800; 9600; 19200; 28800; 38400; 57600; 115200 Baud

Data Bits: 7,8

Stop Bits: 1,2

Parity: Odd, Even, None

Multidrop Capability: Yes, No

5 DEVICES TESTED

Device	Tested (FACTORY, SITE)
To be confirmed	SITE

6 COMMUNICATIONS FUNCTIONS

6.1 Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
Analog Input	Analog Input Registers
Digital Input	Discrete Input Registers
Analog Register	Input and Output Registers
Digital Register	Input and Output Registers
Analog Output	Analog Output Registers
Digital Output	Discrete Output Registers

6.2 Read Operations Supported

FieldServer as a Client
Read Analog Status:
Read Output Registers (4xxxx)
Read Input Registers (3xxxx)
Read Binary Status:
Read Discrete Output Status (0xxxx)
Read Discrete Input Status (1xxxx)
Read Floating Point Value:
Read Floating Point Register (7xxx – 7999)

6.3 Write (Control) Operations Supported

FieldServer as a Client
Write Analog Setpoints:
Preset Single Register (4xxxx)
Preset Multiple Registers (4xxxx)
Write Binary Commands:
Force Single Coil (0xxxx) excluding (7xxx-7999)
Force Multiple Coils (0xxxx) excluding (7xxx-7999)
Write Floating Point Value:
Set Floating Point Register (7xxx – 7999)

6.4 Unsupported Functions and Data Types

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