# FieldServer Protocol Driver Sheet
# Modbus Daniels

**FS-8700-15** **Version: 1.01 / Rev. 0**

## 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 MATRIX

| FieldServer Model | Compatible with this driver |
|---|---|
| FS-x30 | No |
| SlotServer | No |
| ProtoNode | No |
| QuickServer FS-QS-10xx | No |
| QuickServer FS-QS-12xx | Yes |
| ProtoCessor FPC-ED2 | Yes |
| ProtoCessor FPC-ED4 | 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 - SUPPORTED FUNCTIONS AT A GLANCE:

### 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)<br>Read Input Registers (3xxxx) |
| **Read Binary Status:** |
| Read Discrete Output Status (0xxxx)<br>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)<br>Preset Multiple Registers (4xxxx) |
| **Write Binary Commands:** |
| Force Single Coil (0xxxx) excluding (7xxx-7999)<br>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 |



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