

### 1 DESCRIPTION

The FieldServer Profibus DP Master driver can be used to transfer I/O data with up to 125 Profibus DP Slave devices. The FieldServer is programmed with an embedded database using the required 3<sup>rd</sup> party configuration tool. The embedded database contains information on the number of slaves and I/O modules to be transferred with each slave. The tool requires the input of GSD/E files for each slave to be connected.

#### 1.1 Connection Facts

| FieldServer Mode                  | Nodes | Comments  |
|-----------------------------------|-------|---|
| Client DPV1 MASTER (CLASS 1) ONLY | 125   | This is the maximum number of Profibus DP Slaves that can be connected to the FieldServer. A maximum total of 1536 bytes can be transferred with all DP Slaves. |

### 2 FORMAL DRIVER TYPE

Field Bus  
Client Only

### 3 COMPATIBILITY MATRIX

| FieldServer Model      | Compatible with this driver |
|------------------------|-----------------------------|
| FS-x30                 | Yes                         |
| 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: Proprietary  
 Baud Rates: 9.6k, 19.2k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M, 12M bit/s  
 Hardware interface: Anybus-M Profibus DP  
 3<sup>rd</sup> Party Equipment: HMS Anybus NetTool for Profibus\*

### 5 PROPRIETARY PHYSICAL INTERFACES SUPPORTED

| FieldServer Model | Adapter Model #      | Vendor       | Physical Medium |
|-------------------|----------------------|--------------|-----------------|
| FS-B3520          | Anybus-M Profibus DP | HMS Networks | Twisted pair    |

### 6 DEVICES TESTED

| Device               | Tested (FACTORY, SITE) |
|----------------------|------------------------|
| SST-5136-PFB-ISA     | Factory                |
| Anybus-S Profibus DP | Factory                |

### 7 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

#### 7.1 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 Float                           | Buffer arranged as FLOATS         |
| Bit                                    | Buffer arranged as BYTES          |

\* A demo version of the tool is supplied which is limited to connecting up to 2 slaves

### 7.2 Data Operations Supported

| FieldServer as a Profibus Master  |
|---|
| Read Output Buffer Data from Profibus DP Slaves<br>(Max 244 bytes per Slave ) |
| Write Input Buffer Data to Profibus DP Slaves<br>(Max 244 bytes per Slave )   |

### 7.3 Limits

| FieldServer as a Profibus Master                                    |
|---|
| A maximum total of 1536 bytes can be transferred with all DP Slaves |

### 7.4 Unsupported Functions and Data Types

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