



## FieldServer Driver - Ethernet FS-8704-09 SNMP

**Driver Code:** SNMP  
**Version:** 1.00bA  
**Protocol Documentation:** N/A  
**Protocol Version:** N/A  
**Physical Interface:** Ethernet 10 Base T

### Driver Description

The FieldServer SNMP driver provides an SNMP v.1 client and agent (server). The client can be configured to read values specified by their SNMP Object Identifiers (OID's), which are defined in the MIB file (Management Information Base) of the target device. When acting as an SNMP agent, the driver makes the contents of specified integer data arrays available to any SNMP client. The FieldServer MIB file sets out the OID's to use.

The current version of the driver does not handle SNMP traps. The following SNMP data types are currently supported:

- INTEGER
- OCTET\_STREAM
- TIMER\_TICKS



## FieldServer as a SNMP Client

### Map\_Descriptors:

| Column Title        | Function   | Legal Values  |
|---------------------|--|---|
| Map_Descriptor_Name | Name of this Map Descriptor  | Up to 32 alphanumeric characters                                  |
| Data_Array_Name     | Name of Data Array where data is to be stored in the FieldServer. Only used for commands 1,4,6,12. | One of the Data Array names from "Data Array" section above.      |
| Data_Array_Location | Starting location in Data Array  | 0 to maximum specified in "Data Array" section above              |
| Function            | Function of Client Map Descriptor. A Command is a write, and a response is a read                  | RDBC, WRBC, WRBX  |
| Node_Name           | Name of Node to fetch data from  | One of the node names specified in "Client Node Descriptor" above |
| Data_Type           | Data type  | BYTE, INT, INT16, INT32, UINT, UINT16, UINT32                     |
| Length              | Length of Map Descriptor   | 1 to end of data block or less                                    |
| Address             | Starting address of read block   | The start bit number of the data of interest                      |
| Scan_Interval       | How often to update this map descriptor  | interval in seconds   |
| Timeout             | How long to wait for a response  | interval in seconds   |
| SNMP_DA_OID         | Object Identifier  | refer to target device MIB file                                   |



## FieldServer as a SNMP Server

The SNMP driver can act as an SNMP agent to make the contents of dedicated data arrays available to SNMP clients. These data arrays are identified to the driver by their name, which is a combination of the prefix "SNMP\_DA\_" and an index number, e.g. "SNMP\_DA\_1".

## Data\_Arrays

| Column Title      | Function                    | Legal Values   |
|-------------------|-----------------------------|--|
| Data_Array_Name   | Provide name for Data Array | SNMP_DA_1,<br>SNMP_DA_2,<br>...,<br>SNMP_DA_100<br>No leading 0's in the numerical part! |
| Data_Format       | Provides data format        | INT,INT16,INT32<br>UINT,UINT16,<br>UINT32  |
| Data_Array_Length | Number of Data Objects      | 1-10000  |

## Map\_Descriptors

No Server Map Descriptors need to be specified since data arrays are identified to the driver by name, and data array offsets are obtained from the OID received in a poll.