

1 DESCRIPTION

This OPC Server (I/O Driver) communicates with the FieldServer. The method of data transfer is called Data Array Access (DAA). The Data Arrays are arrays of typed data memory in the FieldServer. The source of the information in the Data Arrays can be any one of the standard FieldServer I/O Drivers. It is incumbent on the user to configure the ports and the Map Descriptors on the FieldServer. The Map Descriptors are FieldServer objects containing polling instructions for an I/O Driver to copy data from the Low level Devices into a Data Array. One of the many advantages of this architecture is that it allows many disparate proprietary devices PLC/DCS's etc. to share common data in a reliable embedded device (FieldServer) while providing access to the SCADA/PC application level via this OPC Server. FST OPC Server supports simultaneous communication to up to 10 OPC Clients.

Please refer to the FieldServer Configuration Manual for instructions on configuration on the FieldServer side, the tools required are not part of this package.

FieldServer Mode	Nodes	Comments
Client	Unspecified	There is no known limit to the number of OPC Servers that can connect to the same FieldServer provided they are on different workstations.
Server	10	FST OPC Server supports simultaneous communication to up to 10 OPC Clients

2 FORMAL DRIVER TYPE

Ethernet

Server Only

3 COMPATIBILITY MATRIX

FieldServer Model	Compatible with this driver
FS-B-OPC-01	Yes
FS-x2010	Yes
FS-x2011	Yes
FS-x25	Yes
FS-x30	Yes
FS-x40	Yes
ProtoCessor FFP-FO2	Yes
ProtoNode LER/RER	Yes
ProtoCessor FFP- FD2	Yes
QuickServer- QS-1010	Yes
QuickServer QS-1011	Yes





4 CONNECTION INFORMATION

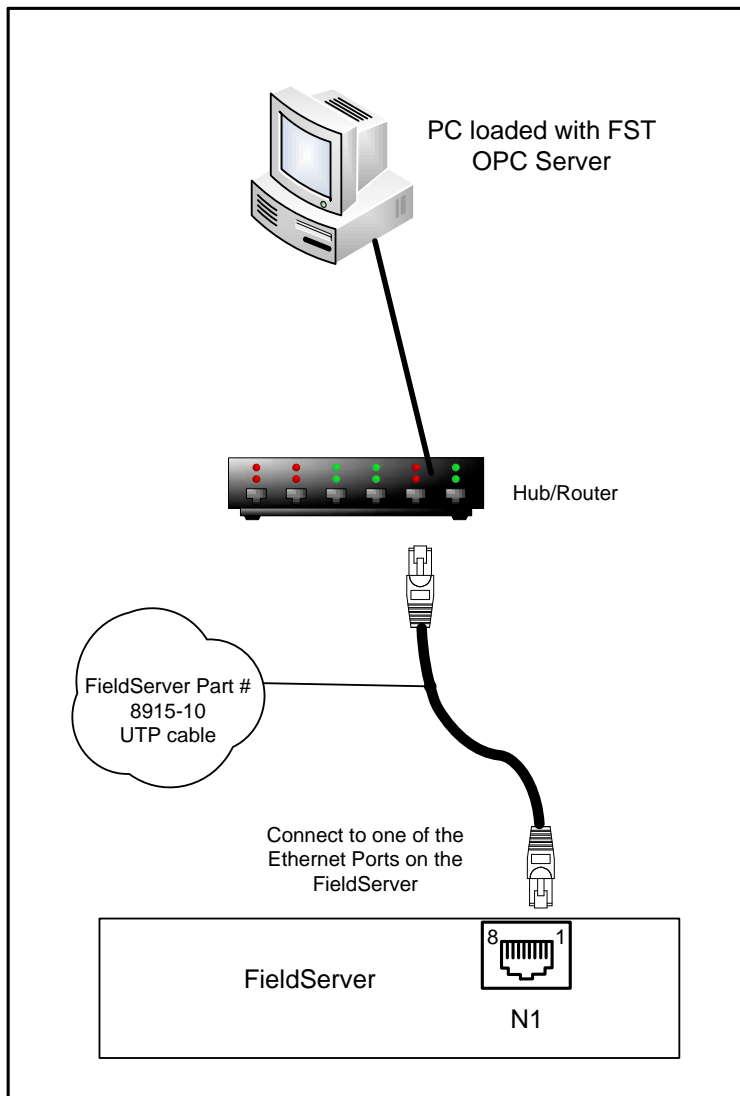
Connection type: Ethernet
Ethernet Speeds Supported 10Base-T, 100Base-T¹

¹ Not all FieldServer models support 100BaseT. Consult the appropriate instruction manual for details of the Ethernet speed supported by specific hardware.

5 CONNECTION INFORMATION

The FST OPC Server communicates with the FieldServers via standard Ethernet & TCP/IP connections. Please refer to the FieldServer Configuration Manual for instructions on setting up the FieldServer side.

Before proceeding to configure the OPC Server it is important to have a proper TCP/IP network setup - verify this by PINGing a FieldServer. Refer to the Microsoft documentation for the setup of the TCP/IP networking on the PC.



5.1 Connection Notes

Please read the FieldServer documentation, regarding the networking requirements of the FieldServer. From the PC side the TCP/IP networking needs to be correctly configured so that UDP packets can be sent received from all FieldServers

6 COMMUNICATIONS FUNCTIONS - SUPPORTED FUNCTIONS AT A GLANCE:

This driver Reads & Writes to the Data Array Memory areas in the FieldServer

6.1 Supported OPC Specifications

OPC DA 2 specifications (OPC Data Access Specifications version 2.05)

6.2 Data Types Supported

FieldServer Data Type	Description (or Device Data Type)
UInt16	16 Bit Signed Integer
UInt32	32 Bit Signed Integer
Float	32 Bit IEEE Floating point
Byte	8 Bit Signed Integer
Bit	Boolean
BitString (Bit Pick)	In any 8,16, 32 bit Integer address

6.3 Read Operations Supported

FieldServer as a Server
SMT Read:
SMT Write:

6.4 Operating Systems Compatibility

The Driver has been tested for compatibility with the following operating systems:

- Windows 7
- Windows XP Professional SP3, SP2
- Windows XP home
- Windows 2000
- Windows 2000 Server