



**Driver Version: 1.03**  
**Document Revision: 5**

## FieldServer Driver - Serial FS-8700-56 Caterpillar CATM5X Protocol Driver

### Description

The Caterpillar M5X driver allows the FieldServer to transfer data to and from devices over RS-232 using Caterpillar M5X protocol. The FieldServer can emulate either a Server or Client. The driver is capable of communications with any device that uses the Caterpillar M5X protocol but has been designed primarily for connection to a Caterpillar CCM which is in turn connected to the Caterpillar engines to be monitored/controlled.

The driver provides a limited set of M5X protocol commands and may address a sub-set of the parameters available in each device. The driver provides formal support for 3500 engines and EMCPII devices only. Other devices may be polled using the address of the parameter required as opposed to user friendly parameter names.

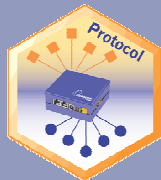
FieldServer Mode	Nodes	Comments
Client	8	The number of Nodes this driver can connect to as a Client is not limited by the driver. Limitations are imposed by the CCM. Consult Caterpillar/CCM documentation for the current limit. The most recent documentation viewed indicates that a CMM can be connected to a maximum of 3 Marine Engine controllers, with no more than 8 controllers connected at any one time. Note that to date FieldServer has not tested any applications where more than one Node is connected to a CCM.
Server	255	Up to 255 Server Nodes can be emulated on one connection

### Formal Driver Type

Serial  
Client or Server

### Compatibility Matrix

FieldServer Model	Compatible with this driver
FS-x2010	Yes
FS-x2011	Yes
FS-x30	Yes
FS-x40	Yes



## Connection Information

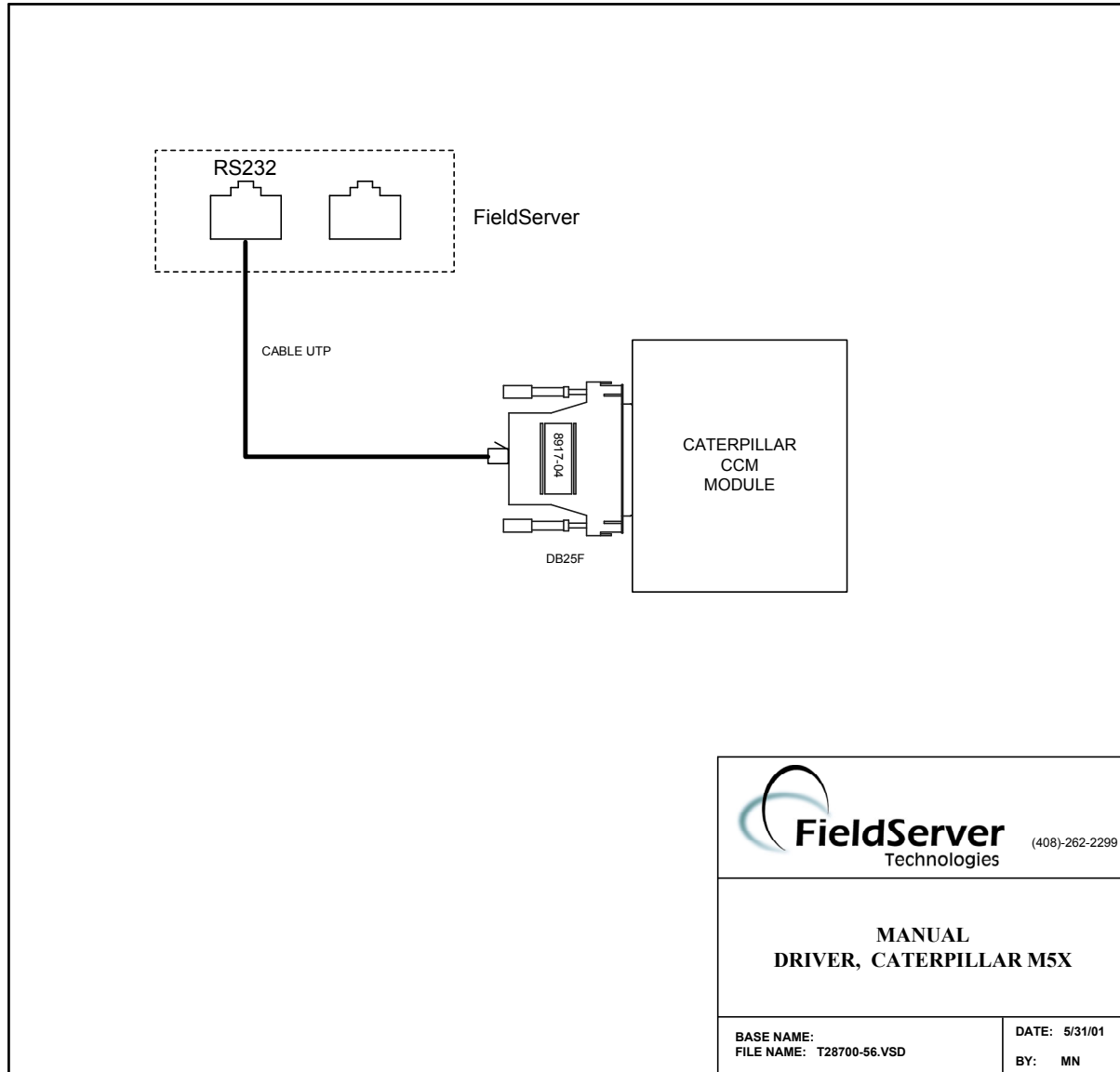
**Connection type:** RS-232  
**Baud Rates:** 110 – 115200, standard baud rates only. The default baud rate of a CCM module is **9600**.  
**Data Bits:** 7,8  
**Stop Bits:** 1  
**Parity:** None  
**Multidrop Capability:** Yes

## Devices tested

Device	Tested (FACTORY, SITE)
Caterpillar CCM Module	Factory



**Connection configurations**



**Connection Notes**

If having problems trying to establish the caterpillar Node ID, set the Node\_ID to 0 in the configuration. Watch the error screen on reboot - the remote device will usually send a message back with an error stating that it cannot accept a response message from a certain Node ID. That Node ID is the relevant Node ID.

The FieldServer cannot be connected directly to the generator/engine controller but must be connected via the CCM module.



## Protocol Driver



A Sierra Monitor Company

THIS PAGE INTENTIONALLY LEFT BLANK