FieldServer Driver
FS8705-15
-
Driver for
Networked Robotics
NTMS4 Temperature Sensor Modules

Description

The NTMS4 driver can read temperatures from Networked Robotics NTMS4 modules using TCP/IP connections.

The driver can process data from multiple modules. The IP Address and Socket Port can be configured for each module.

The driver reads the temperature and cannot perform configuration of the module. It expects that the modules are correctly configured using the Vendor's software or Instructions. The driver can store three data elements per module. The time stamp (in seconds since 1970) of the last time good data was obtained, the temperature data and a status value which is set non-zero when the module reports and error. If the module cannot be reached then the FieldServer will (after a configurable number of retries) mark the node offline. This state and the 3 data elements can be monitored using another protocol.

The driver can only be used as a client. Minimal server functionality is provided only to support our ongoing quality assurance program by facilitating automated testing of the driver. It is not documented or supported. If required please contact the FST sales group to discuss your requirements.

Max Nodes Supported

FieldServer Mode	Nodes	Comments
Client	Many	*The FieldServer will be able to poll multiple modules. The driver will support a max of 200 remote sensors. The driver has been tested with 70 remote sensors.*
Server	0	*Not supported or documented.*

Formal Driver Type

Ethernet
Client

Compatibility Matrix

FieldServer Model	Compatible with this driver
FS-x2010	Yes,
FS-x2011	Yes,
FS-x40	Yes,
FS-X30	Yes,

Connection Information

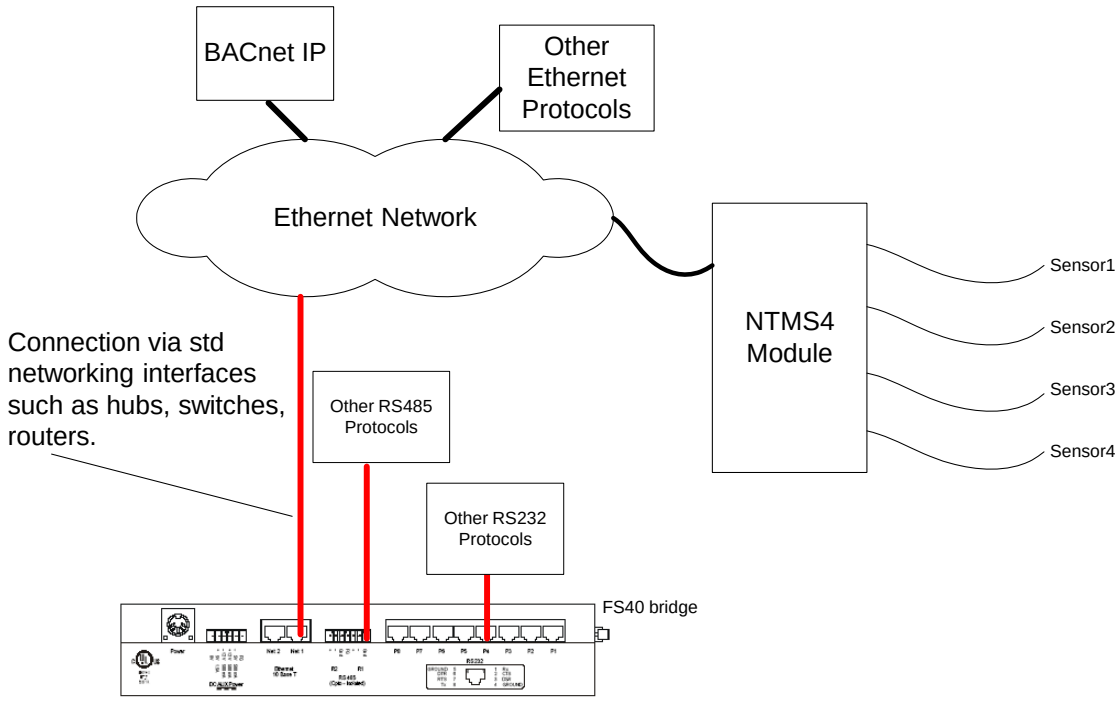
Connection type: Ethernet TCP/IP
Hardware interface: **FieldServer Ethernet Adapters (** N1 / N2 as available)
Multidrop Capability No
Source Port Configurable

Devices tested

Device	Tested (FACTORY, SITE)
rack1/2/3/4/5.networkedrobotics.com	Factory

Connection configurations

Multiple upstream protocols and connection supported. See list of FieldServer Drivers.



Driver Functionality

Temperatures are reported as floating point numbers in the format +-xxx.y. The driver stores data as floating point numbers and it is recommended that an appropriate data array type such as 'FLOAT' be used.

Each time a response is obtained which contained 'Err-' or 'Error-', then the driver extracts the number following the dash and stores that as a status value. If there is no error then the driver stores the value zero to the status value. When an error is reported the driver can, if configured correctly, store a specified value as the temperature value. Thus, it is easy for a consumer of the data to see if the temperature is no longer valid.

Support

This driver was developed by Chipkin Automation Systems (CAS), a FieldServer Approved Integrator®. CAS are proud to provide support for the driver. For support please call CAS at (866) 383-1657.

Revision History

Date	Resp	Format	Driver Ver.	Doc. Rev.	Comment
21 Apr 09	PMC		0.00	0	Created
29 Apr 09	PMC		0.00	1	Updated connection diagram
12 May 09	PMC		0.00	2	Updated to say max=200.