

FS8705-18
Multistack Compu25 Protocol,
Modbus TCP and BACnet and HTML
Gateway

Description

The Compu25 protocol can be used to connect to suitably enabled legacy Multistack Inc, Chiller and Heat Pumps. This is a serial protocol using RS485. Multiple Field devices can be connected on a single trunk. The gateway supports one trunk.

The Gateway connects to the HVAC devices, reads data and stores it internally. When a remote system requests data, this data is served in a form that is appropriate to the requesting protocol. In the event that the connection to the HVAC controller is lost, or data cannot be read, the gateway can signal this to the remote data client.

The gateway requires minimal configuration and can be considered a plug and play component of a system, in that it is ready to operate out of the box with the default configuration.

Max Nodes Supported

Gateway Mode	Nodes	Comments
Client	1	<i>10 devices per trunk (limitation on initial release)</i>
Server	0	<i>Not supported or documented.</i>

Connection Information - Port 1: Debug Port

Connection type:	EIA232
Baud Rates:	Driver Supports : 1200,2400,4800, 9600 ; 19200Baud
Data Bits:	Driver Supports : 7, 8
Stop Bits:	Driver Supports : 1,2
Parity:	Driver Supports : Odd, Even, None
Hardware interface:	N/A
Multidrop Capability	No

Connection Information - Port 2: Compu25 Port

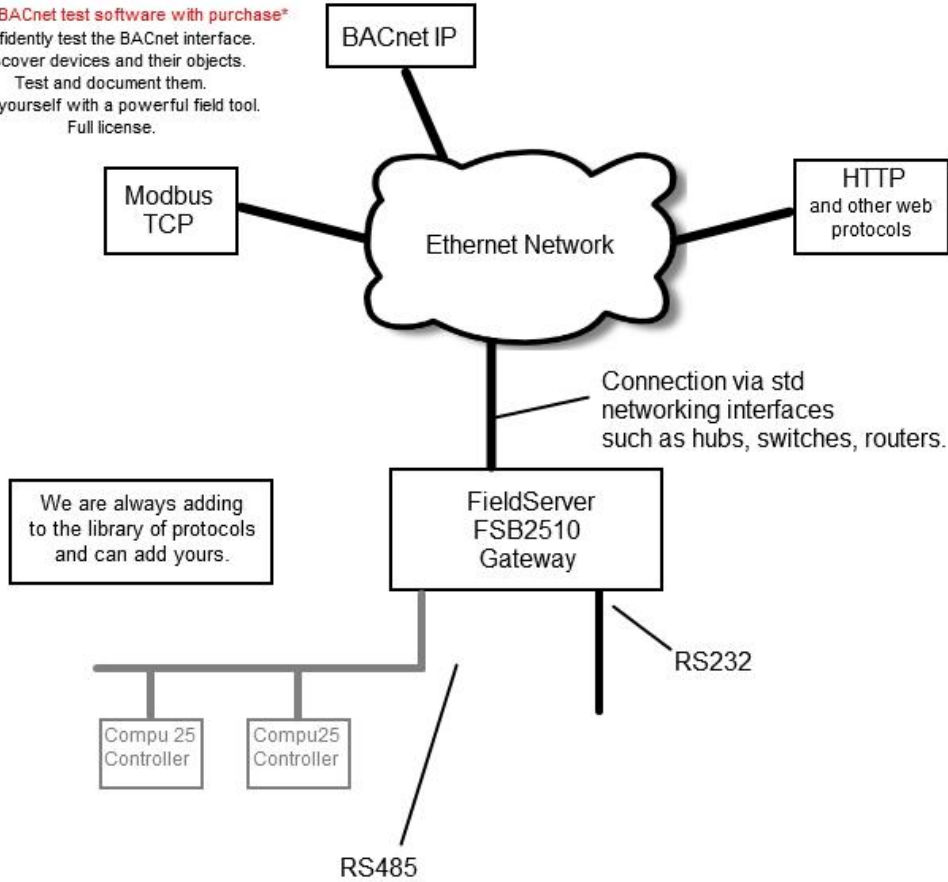
Connection type:	RS485 (Jumper change to RS232)
Baud Rates:	9600 ; 19200Baud
Data Bits:	8
Stop Bits:	1
Parity:	None
Hardware interface:	N/A
Multidrop Capability	Yes

Devices tested

Device	Tested (FACTORY, SITE)
MCHR	Heat Recovery
MCHP	Heat Pump
MCMS	Chiller

Connection configurations

Free BACnet test software with purchase*
Confidently test the BACnet interface.
Discover devices and their objects.
Test and document them.
Arm yourself with a powerful field tool.
Full license.



We are always adding to the library of protocols and can add yours.

Driver Operation

The driver can be configured to read or write any of the addresses documented for these devices. The data sent is stored internally in the Gateway and is made available to other protocols (Modbus TCP, BACnet IP and HTML) .

The frequency with each data point is read is configurable. The driver retries on errors or timeouts. If the data cannot be read then after some configurable time it is marked as out of service.

Configuration

Via Web Page. Configure IP settings, Node ID's, Baud Rate and other parameters.

Exception Handling

If communications to the HVAC are lost, then after some (configurable) time, the data values can all be set to zero, -1 or some other configurable value. This method allows the consumers of the data to know, if the values are valid.

Communications functions

Supported functions.

Not all SEC communication functions are supported. Most that report status info are provided. Those used to configure the unit are not included. Please review this list in determining whether this driver is fit for your purpose. Not all data points are available on all UPS's. Mitsubishi publish a document that details which variables are available per model.

COMMAND	Description	
Read	Read operational data from HVAC device	
Write	Write a command / setpoint	

Supported Data Points

All Data points can be read/written provided the address is known.

The driver will not send the next message until a response has been received from the previous or until a timeout has expired.

Support

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

Revision History

Date	Resp	For mat	Driver Ver.	Doc. Rev.	Comment
20 Oct 2011	PMC		0.00	0	Created