CAS-2700-03
Veeder TCP - TLS 300, 350, 450
Modbus (RTU and TCP) and BACnet and HTML Gateway

Description

The Veeder TCP Driver allows the Gateway to poll Veeder TLS Panel's for status, real time and configuration data. Thus the driver can be used to read Tank Inventory, System Status, Tank Alarms, Sensor Alarms and more .

The Veeder Gateway serves data from a TLS panel as Modbus, BACnet or Web data. The gateway supports all these options simultaneously. Use the data you want and ignore the other.

The Gateway connects to the TLS Panel, reads data and stores it internally. When a remote system requests data, this data is served in a form that is appropriate to the protocol. In the event that the connection to the TLS Panel 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.

The driver is a TCP driver using an Ethernet cable to connect between the Gateway and the TLS Panel. The Panel must have a suitable Ethernet card installed.

Specs.

- **UL and ULc approved**
- 10/100BaseT with RJ-45 connector
- 1x RS232 Port
- 1x RS485 Port (Different Models have additional ports)
- 2MBytes flash memory, 8MBytes of SDRAM
- Power: 5-24VDC
- Operating Temperature: 0 to 70 C
- Dimensions: 4.2" x 3.25" x 1"
- LEDs: Link, Speed/Data, Power

Max Nodes Supported

Gateway Mode	Nodes	Comments
Client	1	*Only 1 TLS Panel per connection*
Server	0	*Not supported or documented.*

Connection Information - Port 1: Veeder Port

Connection type:	TCP via Ethernet Cable
IP Address:	IP of the Veeder TLS Panel
Port:	**10001** (Configurable)

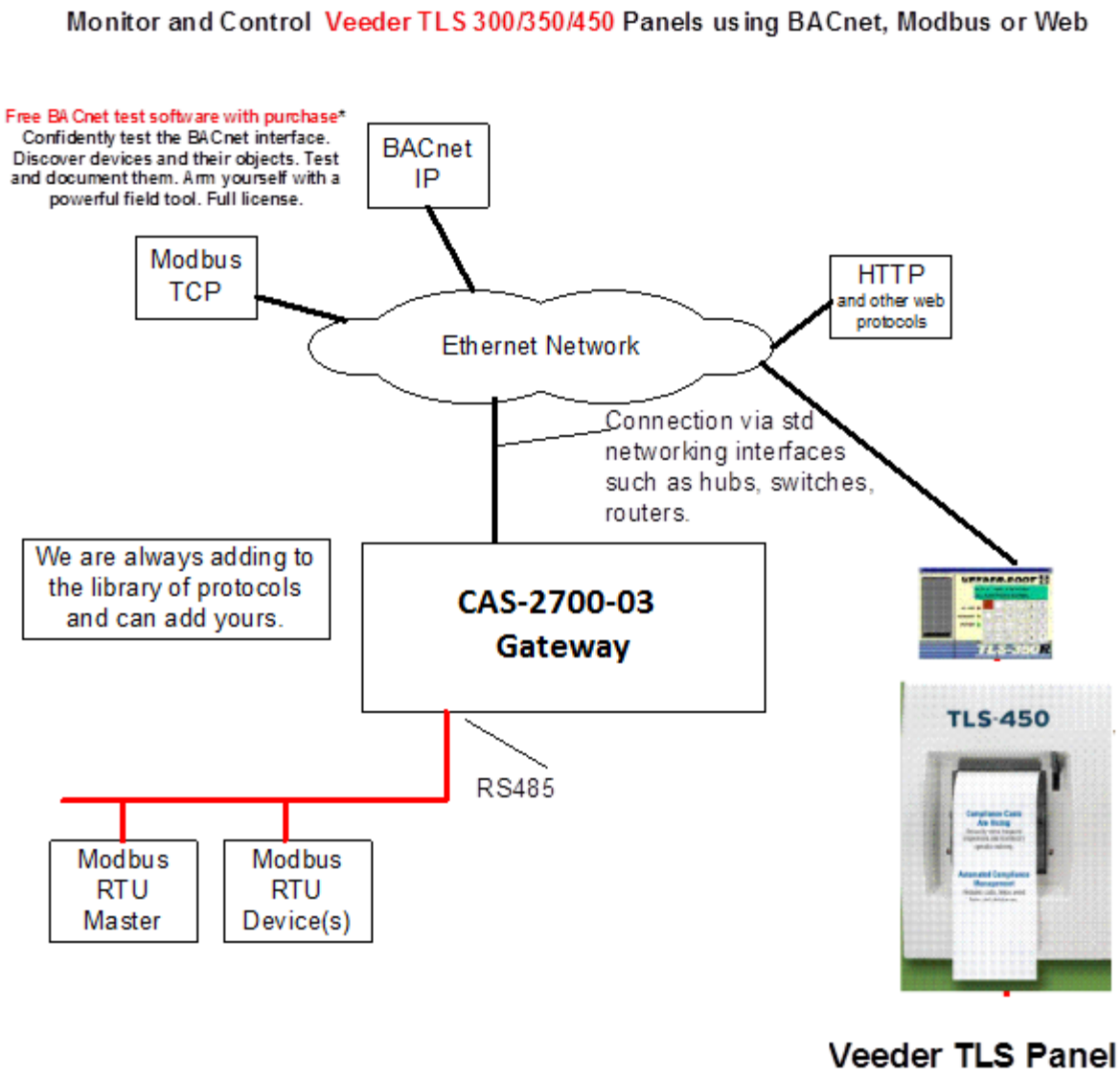
Connection Information - Port 2: Modbus RTU Server Port

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

Devices tested

Device	Tested (FACTORY, SITE)
Veeder TLS 300	Tested
Veeder TLS 350	Tested
Veeder TLS 350 Plus	Tested
Veeder TLS 450	Tested

Connection configurations



Driver Operation

The driver can be configured to execute any of the commands in the 'supported function' list. The data sent is stored internally in the Gateway and is made available to other protocols (Modbus RTU, 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.

The driver reports operating stats and issues on a web page, maintains a log that can be uploaded by HTTP or ftp.

Configuration

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

Users are able to select
Up to 10 Tanks – specify the number and name of each
Up to 10 Sensors – specify the number and name of each
Up to 1 Vacuum Sensor – specify the number and name of each

The names are used to form the names of the BACnet objects and populate the web page showing current values.

Use can specify
ModbusTCP: Node_ID
ModbusRTU: Node_ID, baud, parity, data lengh, stop nits
BACnet: Device instance number, device name.

Communications functions

Supported functions.
Not all Veeder communication functions are supported. The following functions are supported by the Web based configuration. Additional functions are supported but must be configured manually.

COMMAND		
101	System Status Report	
201	In-Tank Inventory Report	
202	In-Tank Delivery Report	
203	In-Tank Leak Detect Report	

B38	Vacuum Sensor Report	

The driver will not send the next command 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
14 Sep 2012	ACF		0.00	0	Created