CHIPKIN
Toll Free: 1 866 383-1657
3381 Cambie St., #211 Vancouver, BC Canada V5Z 4R3

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CAS-2700-02

VeederRoot® to BACnet IP and Modbus (RTU and TCP) and HTML Gateway

PRODUCT DESCRIPTION

Chipkin's™ VeederRoot® gateway is a protocol converter that can read data and alarms from a VeederRoot®TLS Panel and serves the data 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. If 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 any network system. It's ready to operate 'out of the box' and can be installed without an engineer's approval. For a list of tested VeederRoot® devices, refer to Appendix A: Tested Devices. For a list of supported VeederRoot® functions, refer to Appendix B: Supported Functions.

Note: The driver uses the VeederRoot® protocol via a RS232 serial port or TCP/IP therefore the panel must have an appropriate RS232 serial card or Ethernet card installed.

Note: All gateways sold by Chipkin report operating stats and issues to web pages and maintain logs that can be uploaded by HTTP or ftp.

SPECIFICATIONS

The following specifications for the VeederRoot® gateway are common to all Chipkin gateways.

- UL and ULc approved
- 10/100BASE-T with RJ-45 connector
- 1x RS232 port
- 1x RS485 port (different models have additional ports)
- Power: 7 – 24 VDC through an external power supply
- Operating temperature: 0 – 70 °C (32 – 158 °F)
- LEDs: link, speed/data, power
- Dimensions (LxWxH): 107 x 83 x 25 mm (4.2 x 3.25 x 1 in.)

MAXIMUM NODES SUPPORTED

This table summarizes the number of devices supported for each protocol node.

GATEWAY NODE	NODES	COMMENTS
Client	1	Only 1 VeederRoot TLS Panel per connection
Server	*	Can server Modbus, BACnet, and HTTP data to multiple clients

CONNECTION INFORMATION

These tables summarize possible connections from available serial ports.

PORT 0: RS485 – Modbus RTU

Connection type	RS485 (jumper change to RS232)
Baud rates	Driver supports: 9600, 19200, 38400 baud
Data-bits	Driver supports: 8, 7
Stop-bits	Driver supports: 2, 1
Parity	Driver supports: none, odd, even
Hardware interface	N/A
Multidrop capability	Yes

PORT 1: Veeder Root RS232

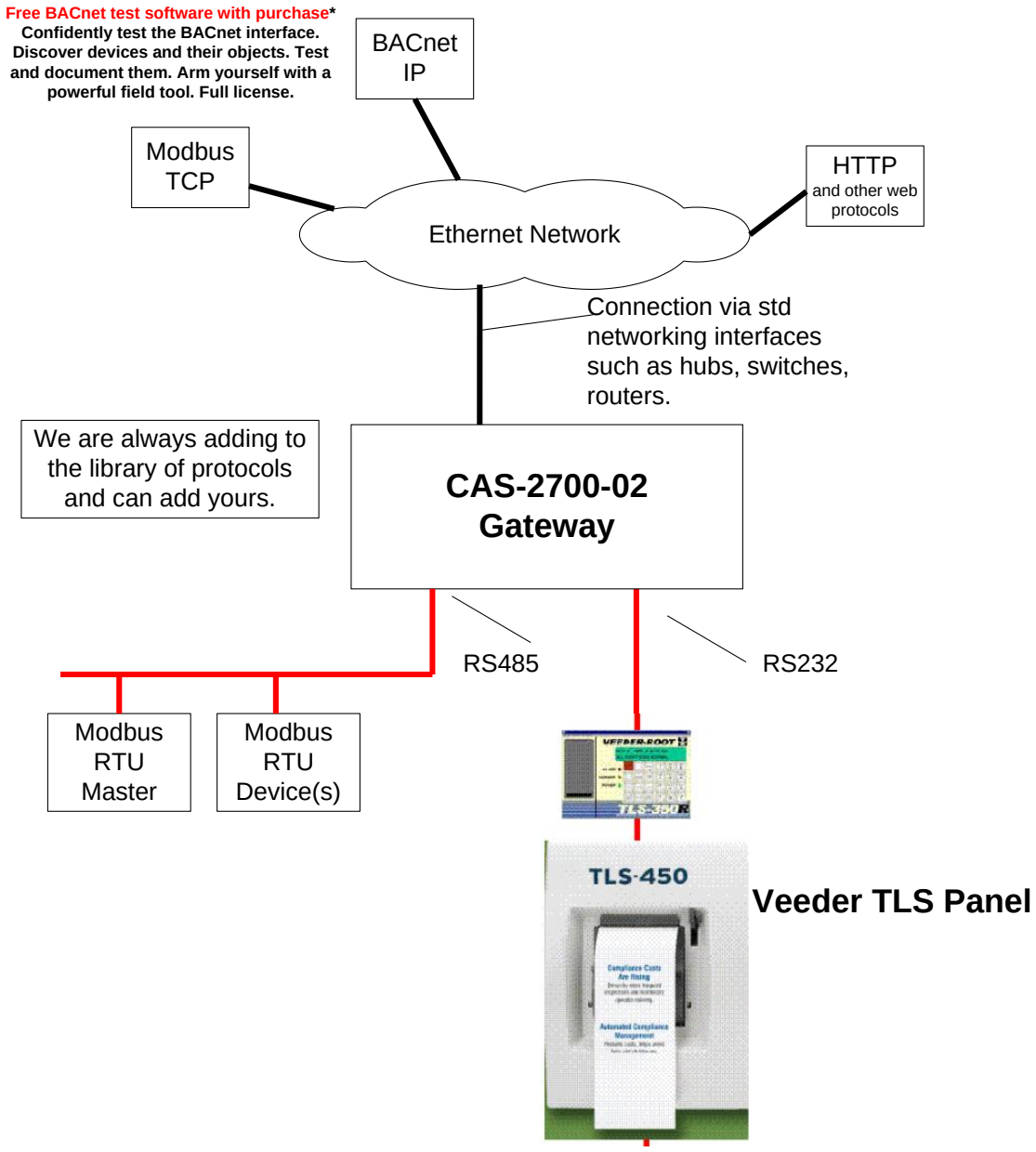
Connection type	RS232
Baud rates	Driver supports: 1200, 2400, 4800, 9600, 19200, 38400, 115200 baud
Data-bits	Driver supports: 8, 7
Stop-bits	Driver supports: 2, 1
Parity	Driver supports: none, odd, even
Hardware interface	N/A
Multidrop capability	No

** Blue represents the gateway's default configuration

CONNECTION CONFIGURATIONS

This block diagram lists common network connections that can monitor data using the VeederRoot® and BACnet IP, Modbus (RTU and TCP) and HTTP protocols.

Monitor and Control Veeder TLS 300/350/450 Panels using BACnet, Modbus or Web



CONFIGURATION

Configuration of the VeederRoot® gateway is handled via the webpages of the gateway. For more information on configuration the device, please refer to the manual: CAS_MAN_CAS2700-02-Veeder-Gateway-Manual.

CUSTOMER SUPPORT

CAS-2700-02 VeederRoot® gateway was developed by Chipkin, and we are proud to provide support for our products. For technical support, sales and customer service, please call us at 1 (866) 383-1657.

REVISION HISTORY

This table summarizes the update history for this gateway data sheet. Please contact Chipkin by phone or email for an updated version of this document.

DATE	RESP.	DRIVER VERIFIED	DOCUMENT REVISION	COMMENTS
26 Aug 2010	PMC	0.00	0	Created
21 Sep 2010	PMC	0.00	1	Updated – replaced supported function list
14 Dec 2010	PMC	0.00	2	Updated – added Modbus RTU block diagram and port settings
08 Feb 2018	ACF	0.14	3.0	Updated – new document theme and added 301 function support

APPENDIX A: TESTED DEVICES

These tables summarize the VeederRoot® devices that have been tested. Other devices may be supported.

DEVICE	TESTED (FACTORY/SITE)
TLS 300C / 300I	Factory, Site
TLS 350 / 350 Plus / 350R	Factory, Site
TLS 450 / 450 Plus	Factory, Site
TLS 4C / 4I	Site

APPENDIX B: SUPPORTED FUNCTIONS

This table describes the VeederRoot® functions that are used by the CAS 2700-02 VeederRoot® gateway

TLS FUNCTION	DESCRIPTION
101	System Status Report
201	In-Tank Inventory Report
202	In-Tank Delivery Report
301	Liquid Sensor Status Report
406	Relay Status Report
B38	Vacuum Sensor Diagnostic Report

Thanks for choosing Chipkin's protocol gateways, data clients and integration services to meet your building and industrial automation requirements!

Chipkin™ is a building and industrial automation protocol expert. We develop, configure, install and support gateways (protocol converters), data loggers and remote monitor and controlling applications. Founded in October 2000, Chipkin provides expert solutions for converting BACnet®, Modbus®, and Lonworks®—to name just a few—and enabling interfaces for HVAC, fire, siren, intercom, lighting, transportation and fuel systems. The high-quality products we offer (including those from other vendors) interface with Simplex™, Notifier™, McQuay™, GE™ and many others—so you can rest assured that we will select the most appropriate solution for your application.

With Chipkin you are buying a solution. Our configuration expertise in this field combined with free BACnet and other tools ensure your success; and our customer support via phone, email and remote desktop tools means that we're there when you need us. Chipkin is a small responsive company, and we live or die by the quality of our service—and with offices in two time zones—we can provide support when you need it. Give us a call now!

Sales and Customer Service

Toll free: 1-866-383-1657

Email: salesgroup1@chipkin.com