Veeder-Root Serial



fieldserver

Description

The Veeder-Root Serial Driver allows the FieldServer to transfer data to and from devices over either RS 232 or RS-485 ports using Veeder-Root protocol as defined in Veeder Root Document 576013-635 Revision J. The Veeder-Root Driver supports TLS350 as per Veeder-Root Document 576013-635 Revision Y, and TLS450 as per Veeder-Root Document 577013-950 Revision G. Since the data protocol is the same for the TLS-350+ as for TL-S350, it is assumed that the driver will support the TLS350+ but this has not been tested. The Driver also successfully communicates with the TLS-450 as it has the same data protocol. Please refer to the driver manual for hardware connections.

The FieldServer emulates a Client.

The Veeder-Root Serial Driver is a poll response driver. Only one query or command can be processed at a time.

A limited set of the queries and commands defined in the protocol specification have been implemented. The reason for the limitation is two-fold. Firstly, not all commands/queries will have any meaning to a Server device as they are principally defined to configure the Veeder-Root Device. Secondly, some commands return very complex data sets which cannot be processed in a method suitable for loading into the FieldServer's Data Arrays.

The driver can show communications statistics, which can be monitored using a Server device.

Connection Facts

FieldServer Mode	Nodes	Comments
Client	1 to 8 depending on the FieldServer Type	Only one node can be connected per port

Formal Driver Type

Client only

Compatibility

FieldServer Model	Compatible	FieldServer Model	Compatible
ProtoCessor	Yes	QuickServer FS-QS-10xx	No
ProtoCarrier	Yes	QuickServer FS-QS-12xx	Yes
ProtoNode	Yes QuickServer FS-QS-20xx Yes		Yes
ProtoAir	Yes	QuickServer FS-QS-22xx	Yes
		QuickServer FS-QS-3x10-F	Yes

Connection Information

Connection Type: RS-232 or RS-485 (Half-Duplex) Baud Rates: Standard baud rates up to 9600 (TLS-350), 115200 (TLS-450) Data Bits: 7,8 Stop Bits: 1,2 Parity: Odd, Even, None Multidrop Capability: No

Devices Tested

Device	Tested (Factory, Site)
TLS-350	Site
TLS-450	Site
Evo 5000	Site

Communication Functions

Supported Functions – TLS-350

The revision number indicates the minimum Veeder-Root firmware revision required for support of the function. The function numbers are hexadecimal numbers.

Function	Revision	Description			
I	SYSTEM REPO				
101	1	System Status Report			
102	1	System Configuration Report			
113	14	Active Alarm Report			
114	19	Cleared Alarm Report			
IN-TANK REPORTS (7.2.2)					
201	1	In-Tank Inventory Report			
202	1	In-Tank Delivery Report			
204	1	In-Tank Shift Inventory Report			
20D	15	In-Tank Stick Height Report			
	SENSOR REPORTS (7.2.3)				
301	1	Liquid Sensor Status Report			
306	1	Vapor Sensor Status Report			
311	1	Groundwater Sensor Status Report			
341	2	Type A (2 Wire CL) Sensor Status Report			
346	2	Type B (3 Wire CL) Sensor Status Report			
34B	4	Universal Sensor Status Report			
		ORTS (7.2.4)			
381	7	Pressure Line Leak Status			
386	10	WPLLD Line Leak Status			
	I/O DEVICE REPO	ORTS (7.2.6)			
401	1	Input Status Report			
406	1	Relay Status Report			
	SYSTEM DIAGNOSTIC REPORTS (7.4.1)				
901	1	Self Test Results Report			
902	1	System Revision Level Report			
905	15	System Revision Level Report II			
	CONTROL FUNC	TIONS (7.1)			
1	1	System Reset			
2	1	Clear Power Reset Flag			
3	1	Remote Alarm Reset			
31	10	Confirm Clear Function			
51	1	Clear In-Tank Delivery Reports			
52	1	Start In-Tank Leak Detect Test			
53	1	Stop In-Tank Leak Detect Test			
54	5	Delete CSLD Rate Table			
81	7	Start Pressure Line Leak Test (3.0 GPH only in V18)			
82	7	Stop Pressure Line Leak Test			
83	10	Start WPLLD Line Leak Test (3.0 GPH only in V18)			
84	10	Stop WPLLD Line Leak Test			

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Protocol Driver Sheet – Veeder-Root Serial

Supported Functions – TLS-450

Function	Revision	Description
SYSTEM REPORTS		
101	1	System Status Report
IN-TANK REPORTS		
201	1	In-Tank Inventory Report

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