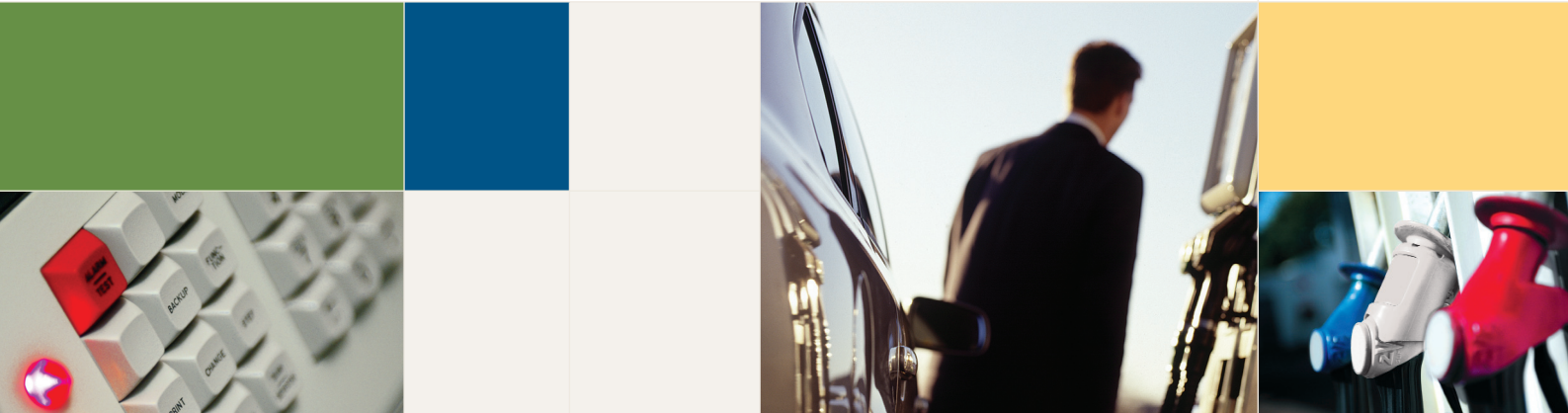


TLS-350R Monitoring System

Industry leading wet stock management system that enhances control and helps improve your bottom line



Keep control

Manage your fuel like your in-store goods with variance analysis

Veeder-Root's TLS-350R monitoring system

Veeder-Root's TLS-350R Monitoring System adds value to automatic tank gauging with highly advanced inventory management capability – Business Inventory Reconciliation. This fully integrated system automatically collects metered sales information from electronic and mechanical dispensers and provides a comprehensive reconciliation with in-tank inventories and deliveries.

AccuChart™

The TLS-350R uses AccuChart™, Veeder-Root's patented tank calibration algorithm, to minimise errors due to dynamics, such as tank tilt, deflection and end shape, to create an optimal tank chart for each tank in the system. The automatic calibration process is conducted through the typical operating levels in the tank as fuel is dispensed. The end result is the most accurate inventory measurement available on the market today. The updated calibration charts can also be obtained from the TLS-350R through an RS-232 interface using a computer.

Variance analysis

The highly accurate inventory readings introduced through AccuChart™ allow the system to pinpoint fuel loss issues,

such as sales losses or delivery shortages. We call this process variance analysis. Variance analysis allows the operator early identification of fuel loss problems to give the user a competitive edge.

Adjusted delivery reporting

Adjusted delivery reporting ensures that you get what you pay for. When a bulk delivery is made, the TLS-350R measures the amount of any fuel dispensed during delivery and provides a report showing the volume increase, the amount of fuel dispensed during the delivery and the actual delivery amount.

Periodic variance thresholds

The TLS-350R automatically calculates periodic variance thresholds and includes the variances on a Periodic Reconciliation Report. The variance threshold is programmable so it can be set to local regulations if necessary.

Automatic tank-to-meter mapping

Manual methods of mapping tanks to meters have historically provided challenges to installers and operators relative to inventory reconciliation. Automatic tank-to-meter mapping eliminates the possibility that product being dispensed through a meter is reconciled against the wrong tank. When dispensing begins, the TLS-350R recognises a reduction in in-tank inventory and associates the reduction with a dispensing event.

This association allows for construction of an accurate meter to tank map.

Tank-to-meter mapping on average takes up to two days, depending on the level of station activity.

Modular design meets current business and regulatory requirements, with expansion capabilities for future needs

The TLS-350R lets you choose the exact set of risk management and fuel management features you need today. As regulatory requirements and your business needs change, the flexible TLS-350R platform allows you to add new features tomorrow. A safe investment, a smart decision.

The TLS-350R is available with an integral printer or can be connected to a remote printer. The system can be programmed to generate reports at the end of a shift, day or period. Periodic reports are programmable to cover up to a 62-day cycle and can print in either column (summary) or row formats.

Leading edge leak detection technology

The TLS console range has defined the industry standard for tank monitoring systems with: advanced magnetostrictive probe technologies offering 0.76 LPH monthly monitoring and 0.38 LPH volumetric tank testing; accurate, automatic electronic line leak

detection; advanced technology sensors; and a complete line of standard leak sensors to monitor double-wall tanks, containment sumps, and wet or dry monitoring wells.

Plus, for 24-hour stations and high-volume operations, Continuous Statistical Leak Detection (CSLD), the most advanced leak detection technology available today, provides 24-hour, automatic leak detection without tank shutdown. No lost business. No lost operating time.

Leading Edge Business Management Features

The TLS-350R takes business management a step beyond normal fuel inventory management. The internal modem options provide auto-dial fax capability, letting you send up to 16 different reports to up to 8 separate fax machines on a programmable schedule and fax alarm messages instantaneously.

The optional fuel manager software available for the TLS-350R allows you to track average daily fuel usage, predict

the days of remaining inventory, and improve delivery scheduling.

By utilising Inform™, Veeder-Root's tank management software, all inventory management and environmental compliance can be easily centralised on a personal computer in one location. The use of these time and money saving options extend your investment in the TLS-350R beyond environmental risk management requirements, improving your bottom line.

Features

- Automatic Business Inventory Reconciliation
- AccuChart™ Automatic Tank Calibration
- Automatic Tank-To-Meter Mapping
- 0.38 LPH and 0.76 LPH In-Tank Leak Detection with Magnetostrictive Probes
- Electronic Line Leak Detection Capabilities
- Inventory Monitoring and Reporting
- Interstitial/Sump Leak Sensing Capabilities
- Vapor Well Monitoring Capability
- Groundwater Monitoring Capability
- Input/Output Capability
- Sump and Dispenser Monitoring Capabilities
- RS-232 Data Communications
- Ethernet TCP/IP Communications
- Internal Auto-Dial Fax (SiteFax™)/modem communications
- Optional Integral Printer or Remote Printer Interface
- Audible and Visual Alarm Capabilities
- Monitors up to 16 tanks
- Leak Testing and Reconciliation for Manifoldd Tanks

Emergency generator applications

- Selectable via programming
- One system handles mix of standard and emergency generator tanks
- Records generator activity
- Complete inventory reports before and after generator operation

Standard Models

Part number		
UL 115 Volt	ATEX 230 Volt	Description
848290-122	848260-124	TLS-350R Monitoring Console with Integral Printer (includes Printer Communications Module)
848290-102	848260-104	TLS-350R Monitoring Console without Integral Printer
848291-102	848261-104	TLS-350R PC Version without Printer or Keyboard (requires Inform™ single site software)

TLS-350R Interface Modules

The TLS-350R monitoring console contains three compartments in which individual interface modules can be installed. Interface modules may be factory-installed in the console upon initial ordering, or ordered separately as spare modules to expand an existing system.

Part number	Description	Feature Compatability (where applicable)	UL	ATEX
LOW-POWER COMPARTMENT				
329356-002	Four-Input Probe Interface Module	Series 8463 Mag Plus Probes Series 8493 Low Level Magnetostrictive Probe	✓	✓
329358-001	Eight-Input Interstitial/Liquid Sensor	Series 7943 Interstitial Sensor for Fiberglass Tanks and Interstitial Sensor for Steel Tanks Series 7943 Piping Sump Sensor Series 7943 Hydrostatic Sensor Liquid Interstitial Sensor	✓	✓
329357-001	Five-Input Vapor Sensor Interface Module	Series 7943 Vapor Sensor	✓	✓
329399-001	Five-Input Groundwater Sensor Module	4SITE Series 7943 Groundwater Sensor	✓	✓
329956-001	Eight-Input Type A Sensor Interface Module	4SITE Series 7943 Discriminating Interstitial Sensor	✓	✓
329950-001	Six-Input Type B Sensor Interface Module	4SITE Series 7943 Discriminating Dispenser	✓	
330843-001	Six-Input Pressurized Line Leak Interface Module (One per console)	Series 8484 Pressurized Line Leak Detection System Requires Version 7.0 or higher console software	✓	✓
HIGH-POWER COMPARTMENT				
329359-001	Four-Relay Output Interface Module		✓	✓
329360-001	Two-Input/Two-Relay Output Interface Module		✓	✓
329999-001	Pump Sense Interface Module	Accepts up to four inputs	✓	✓
330374-001	Three-Output Pressurized Line Leak	Series 8484 Pressurized Line Leak Detection System	✓	✓
330374-002	Controller Interface Module (Two per console)	Requires Version 7.0 or higher console software		
COMMUNICATIONS COMPARTMENT				
330149-002	SiteFax Interface Module	Allows hookup to most remote facsimile, modem or teletype equipment. Requires Version 3.0 or higher console software	✓	✓
330586-001	Dual-Port RS-232/RS-485 Interface Module	Provides 1 x RS-232 and 1 x RS-485 connection	✓	✓
461-100-4103	Dual-Port DIS Interface Module	As above, with RJ45 cable x 3m		✓
461-100-4102	Single Port DIS Interface Module	Provides 1 x RS-485 connection, with RJ45 cable x 3m		✓
330148-001	RS-232 Interface Module with Auxiliary Port (Slot 4 only)	Provides two 25-pin D-connectors for data transmission to P.O.S. terminal, printing device or computer	✓	✓
329362-001	RS-232 Interface Module	Provides a 25-pin D-connector for data transmission to P.O.S. terminal, printing device, or computer	✓	
330546-002	RS-232 SiteLink Interface Module	As above, with external modem compatibility	✓	✓
330000-001	Remote Printer Interface Module	Provides a 25-pin D-connector for data transmission to a remote serial printer	✓	✓
330020-425	Ethernet – TCP/IP Communications Module	Provides connectivity to local and wide area networks (LAN/WANS)	✓	✓
532-100-2021	Internal Landline Modem	Version 23.0 software or higher requires modem adapter 137-003-000X		✓
532-100-2022	Internal GSM Modem	Version 23.0 software or higher, no SIM card		✓
Various	Dispenser Interface Module	Allows sales reconciliation and AccuChart™ automatic calibration	✓	✓

Specifications

Operating Temperature Range	0°C to 45°C (32°F to 118°F)
Storage Temperature Range	-10°C to 45°C (15°F to 118°F)

Dimensions

Width x Height x Depth:	51 x 33 x 19cm
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