# Digital Pressurized Line Leak Detection System

Why DPLLD for Detecting Line Leaks?

The Veeder-Root Digital Pressurized Line Leak Detection (DPLLD) system is designed to meet your everyday compliance needs in a variety of applications. Our patented technology performs precision line leak testing at full pump pressure for 0.1 Gallons Per Hour (GPH)/0.38 Liters Per Hour (LPH) and 0.2 GPH/0.76 LPH, and a pressure decay test to meet the U.S. Environmental Protection Agency (EPA) 3.0 GPH/11.4 LPH test requirements. DPLLD offers flexible testing and digital reporting options, helping to detect catastrophic leaks. When paired with a TLS-450PLUS Automatic Tank Gauge (ATG), customers can monitor up to 1,178 gallons/4,459 liters of fuel line volume.
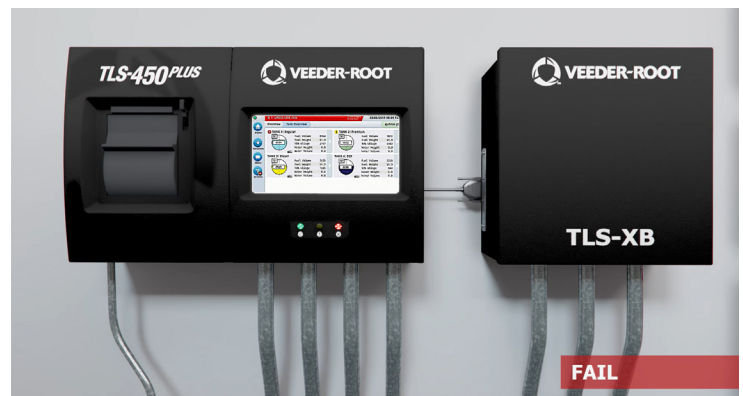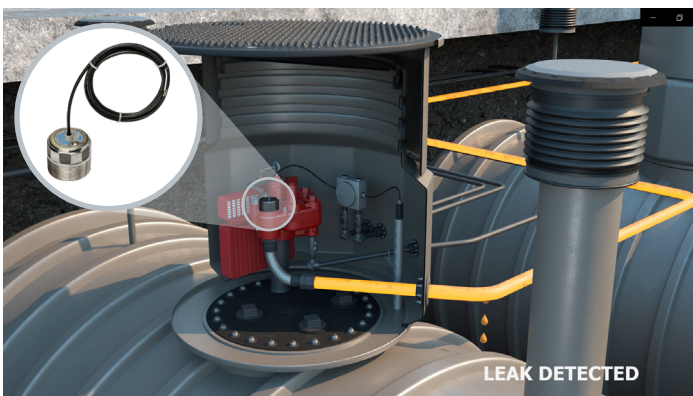
If the pressure is out of normal range, the TLS-450PLUS will record a failing result and generate an audible and visual alarm for the store operator.

SYSTEM FEATURES

Equipment Design

- **Pressure sensor is installed easily** without breaking piping or adding a new sump
- **Stainless steel construction** meets the challenges of a highly corrosive environment
- **Test lines at full pressure** for quick and accurate results, without restricting fuel flow rate
- **Not impacted by thermal contraction of fuel in the line** due to changes in temperature

System Functionality

- **Monitors line pressure during dispensing activity** to ensure a catastrophic leak is not occurring during a dispense
  - If a leak is detected at a pre-set pressure threshold, the system will shutoff power to the Submersible Turbine Pump (STP) to minimize environmental damage and help prevent a public safety issue
- **Conducts test once all dispensing is completed** to ensure the integrity of the line
- **Test can be manually performed** to reset alarms
- **Built-in calibration verification** to notify the site operator when the pressure transducer is not operating properly
- **Auto-Confirm function**, when enabled, runs a second line leak test, if an initial test failure occurs, to verify and reduce false alarms due to mechanical issues that may be occurring in other parts of the fueling system
- **Provides two alarm shutdown options when failure occurs**
  1. Standard Dispenser Shutdown (Alarm and Shutdown)
  2. Optional No Shutdown (Alarm Only)

▶ SUPPORTS MANIFOLDED LINES

One transducer per manifolded line is required

THE RED JACKET STP   THE RED JACKET STP
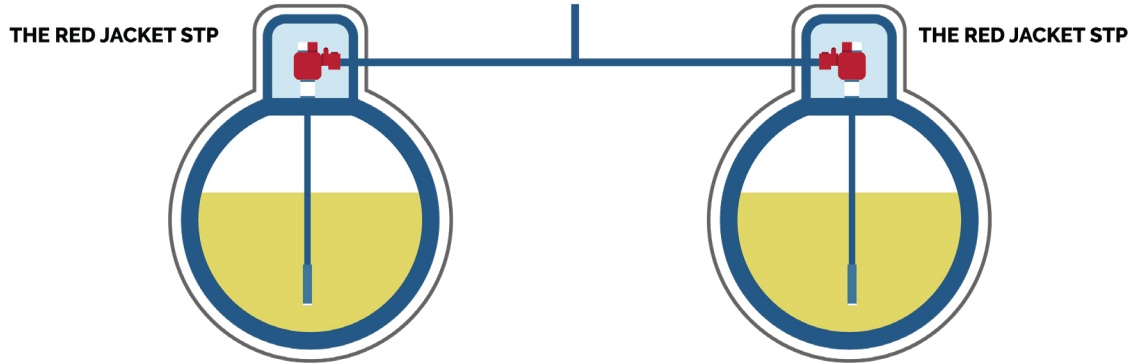
STPs & Piping	
Supports a wide-range of pump and pipe types	Utilizes SwiftCheck Valve on early generation Red Jacket Standard STPs
For further details, **click here for the Line Leak Application Guide**	

Line Leak Transducer Specifications	
Operating Temperature	-25°F to 130°F/-32°C to 54°C
Compatible Fuel Types	• Unleaded Gasoline • Leaded Gasoline • 5% Methanol • Up to 100% Ethanol • 15% MTBE • Diesel • Biodiesel (Up to B100) • Kerosene • Jet Fuel • Aviation Gasoline • DEF
Line Flow Rate	120 GPM/473 LPM Maximum w/ SwiftCheck Valve
Operating Range	0 to 70 PSI/0 to 4.83 Bar
Proof Pressure	200 PSI/13.79 Bar
Maximum Vertical Pipeline Height Above Transducer	11 Feet/3.4 Meters
Minimum Pump Output Pressure	23 PSI/1.59 Bar
Maximum Volume of Fuel Monitored	TLS-450PLUS – 1,178 Gallons/4,459 Liters

TLS-450PLUS Line Leak Digital Transducer Ordering Information	
Part Number	**Description**
0859080-001	Digital Pressurized Line Leak Detector without SwiftCheck Valve, UL
0859080-002	Digital Pressurized Line Leak Detector with SwiftCheck Valve, UL
0332812-001	Universal Sensor Module (USM) Interface for Probes, Sensors, and DPLLD
0332813-001	Universal Input/Output Interface Module (UIOM) for Relay Control and Input Signal Monitoring *
0332972-007	Ultimate Testing: Digital Line Leak Detection
0332972-008	Risk Management: Digital Line Leak Detection
0332972-009	Base Compliance: Digital Line Leak Detection

* Required to ensure STP pump control when RJ Diagnostic Alarm is generated or line shutdown to meet regulatory or business needs (Utilizes 5 Inputs and Outputs)