# Ultrasonic, Non-Invasive, Fluid Level Monitoring Scalable...Dependable

#### Advantage

provides products of unsurpassed quality, functionality and dependability that are manufactured to the highest standards and supported with a three-year warranty

# **Point Level Detector (PLD)**

The PLD is a non-invasive, compact liquid level detector using the most reliable, integral ultrasonic circuitry available.



ntrotek Point Level Detector (PLD) is extremely user friendly with a sleek, compact design incorporating integral electronics that never require calibration. The PLD is the most advanced non-invasive, pulse-wave ultrasonic sensor available for liquid level detection with the emphasis on reliability, accuracy, and repeatability.

# TECHNOLOGY

Our patented pulse-type ultrasonic technology provides highly reliable, non-invasive liquid level or air detection capabilities in the most critical applications where patient or process safety is mandatory. Many of the variables which affect the accuracy of amplitude based on continuous-wave ultrasound are greatly reduced if not eliminated by pulse-type technology.

# HIGHLIGHTS

- Off-the-shelf, ready to use with a wide range of plastic containers and vessels.
- Reliable pulse-type, non-invasive ultrasonic technology.
- Customized electronic options upon request.
- Dry coupled; no coupling gel required.
- Provides digital output signal depicting precise liquid level.
- Simple uni-body construction with no moving parts.
- Factory-calibrated and maintenance-free
- ◆ High noise immunity to EMI and RFI.
- ◆ Quickly & easily mounted and removed.

# APPLICATIONS

- Liquid Level Detection with a TTL CMOS digital output signal. In addition to a wide array of uses within medical-related equipment, the PLD is utilized to improve processes for the following applications:
  - Fluid & chemical handling
  - Laboratory & instrumentation
  - Chromatography
  - Biotech
  - Pharmaceutical manufacturing
  - Medical diagnostic instrumentation
  - Reagent production
  - Food & beverage production
  - Waste containment



INTROTEK

**CERTIFICATIONS** 



#### **PLD / Point Level Detector**

# SENSOR PART NUMBER

Please contact an Introtek Application Specialist to determine the optimal configuration for your application.

# **FUNCTIONAL SPECIFICATIONS**

#### **Supply Voltage:**

5 VDC, 12 VDC

#### **Supply Current:**

15 mA without LED; 24 mA with LED

#### **Logic Output:**

CMOS levels; programmed to deliver a "high" output signal when fluid is detected at a predetermined level from the exterior of the vessel.

#### **Operating Temperature:**

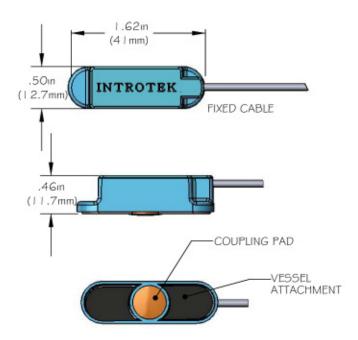
 $+41^{\circ}$  to  $+140^{\circ}$  F ( $+5^{\circ}$  to  $+60^{\circ}$  C).

#### **Humidity:**

0% to 95% Non-Condensing

#### Repeatability:

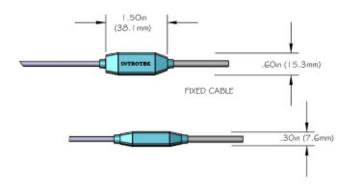
 $\pm 0.5\%$ 





# OPTIONS

24 VDC supply voltage option using a miniature inline module (illustrated below)



#### **Optional LED Indicator**

The addition of a red LED on the PLD is available. The LED is designed to illuminate indicating the presence of the fluid level where the PLD is mounted on the exterior side of a vessel.

Custom OEM designs