

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

**The Introtek 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.



**I**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

Introtek 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.

### INTROTEK CERTIFICATIONS



### 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

## 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:

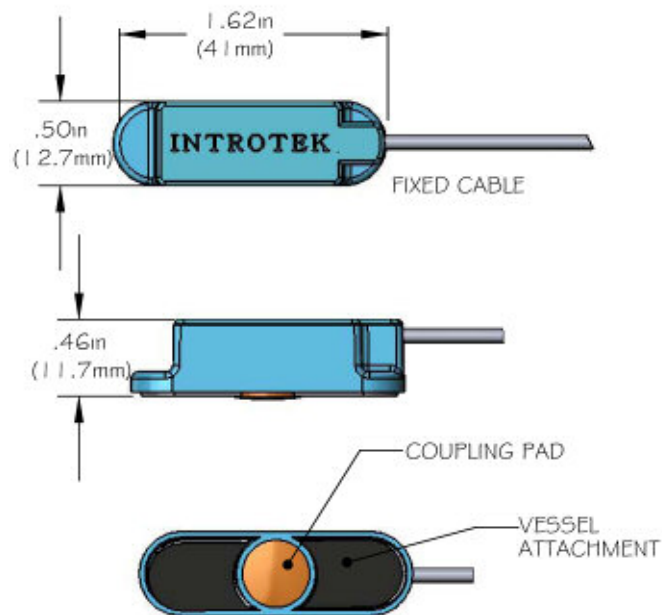
+41° to +140° F (+5° to +60° C).

#### Humidity:

0% to 95% Non-Condensing

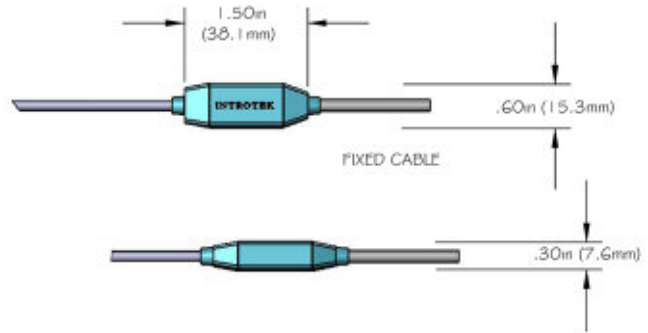
#### Repeatability:

±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.

#### Additional Options

- Custom OEM designs

### THREE-YEAR WARRANTY

All Introtek systems are warranted free of defects in materials or workmanship for three full years from the date of original factory shipment. The external coupling pad of the PLD is exempt from the three-year warranty as it is covered with a limited one-year guarantee against manufacturing defects.

If returned within the warranty period; and, upon factory inspection of the unit, the cause of the malfunction is determined to be defective material or workmanship; then, Introtek will repair or replace the system at no cost to the purchaser (or owner) other than transportation.

Introtek shall not be liable for misapplication, labor claims, direct or consequential damage or expense arising from the installation or use of the equipment. There are no other warranties expressed or implied, except special written warranties covering some Introtek products.



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