



**The Introtek Advantage** provides products of unsurpassed quality, functionality and dependability that are manufactured to the highest medical device standards and backed by a three-year warranty.

## Miniaturized Blood Component Detector

*Introtek miniaturized Blood Component Detector performs optical-based detection non-invasively for fluid within clear tubing for many critical processes.*



INTROTEK® optical sensing technology is designed to detect fluid on clear tubing in a variety of critical processes. Unwanted elements in fluid can be detected in order to ensure the safety of a procedure or process.

### TECHNOLOGY

INTROTEK optical sensors with INTROTEK microcontroller-based circuitry are designed to perform blood detection in clear tubing in a variety of critical applications such as Hemodialysis, where it is desirable to detect blood leaking through a membrane in medical applications.

### HIGHLIGHTS

- Non-invasive optical technology
- Compact, free-entry design
- Small footprint
- Low cost
- Low power consumption
- Field calibratable
- Integratable electronics
- Remote electronics options

### INTROTEK CERTIFICATIONS



### APPLICATIONS

- Blood leak detection/dialysis
- Blood component vs. Saline
- Blood processing devices
- Contamination of fluids
- Hemodialysis

# Miniaturized Blood Component Detector

## DETECTOR PART NUMBER

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

## FUNCTIONAL SPECIFICATIONS

### Calibrate Input:

Provides adjustment for tube insertion. Calibration must be performed after each tube insertion before output may be considered valid.

### Response Time:

Blood detected in 100 ms

## OPTIONS

- Logic and analog output signals
- Alternative slot sizes (subject to engineering evaluation)
- Field-programmable blood level threshold
- Electronics available.
- Electrical "reference design" available for easy integration

## VALIDATION TESTING

The Blood Component Micro Detector is designed to be tested in conjunction with the following specifications:

### Electrical Fast Transients:

IEC 61000-4-4:2004

### Radiated Emissions, Group 1, Class B:

CISPR 11

### Electrostatic Discharge:

IEC 61000-4-2:2002

### Radiated Immunity:

IEC 61000-4-3:2002

### Power Frequency Magnetic Fields:

IEC 60601-1-2:2007 (3rd Edition)

### General Safety Requirements:

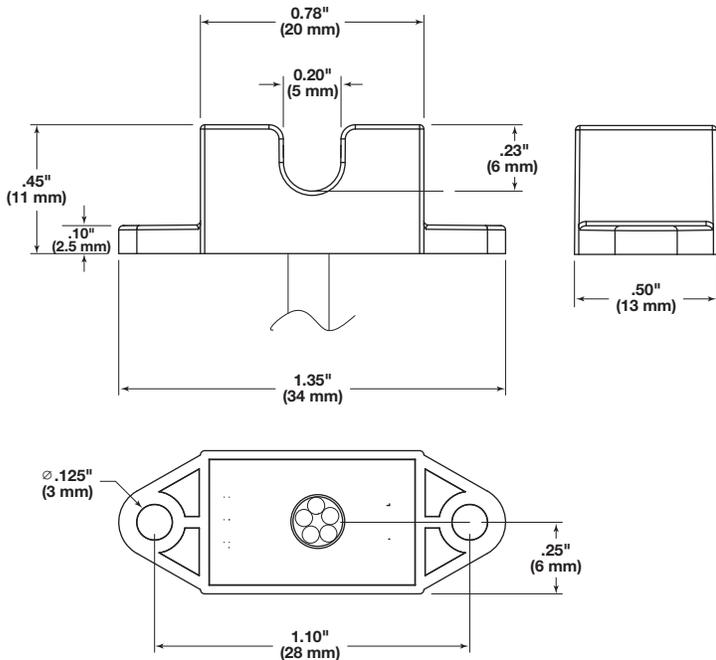
IEC 60601-1:2005+A1:2012 (E)

## 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.

If returned within the warranty period, *with no modifications to the sensor; the original manufacturing label intact;* and, upon factory inspection of the unit, the cause of the malfunction is determined to be defective material or workmanship; INTROTEK will repair or replace the system at no cost to the purchaser (or owner) other than transportation. **If a unit is returned without an original label, the warranty is void.**

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.



Mini Blood Component Detector Dimensions  
inches (mm)

# INTROTEK

Introtek International, L.P., Subsidiary of Magnetrol International, Incorporated  
150 Executive Drive • Edgewood, New York 11717-9998  
631-242-5425 • Fax 631-242-5260 • [www.introtek.com](http://www.introtek.com) • [info@introtek.com](mailto:info@introtek.com)

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Performance specifications are effective with date of issue and are subject to change without notice

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