



Miniature Blood Component (BC1) Detector

The **Introtek BC1 Miniature Blood Component Detector** is a non-invasive, optical-based sensor used in critical medical processes like Hemodialysis, to detect unwanted elements in fluid passed through transparent tubing. Alarm thresholds can be easily and reliably set to detect even small trace amounts of blood, ensuring the safety of a procedure or process. **The Blood Component Detector** with Introtek's microcontroller-based circuitry is available in several configurations that support different interfaces and considerations based on the intent or type of design integration.

For more information, view the BC1 product video found at https://www.introtek.com/videos/BC1_Overview.swf

PRODUCT FEATURES

- Non-invasive optical technology
- Compact, free entry design
- Low cost
- Low power consumption
- Field calibratable for blood level threshold
- Remote electronics options available
- Optimal protection against ambient light

Miniature Blood Component Detector (BC1)



APPLICATIONS

- Hemodialysis
- Blood Processing Equipment
- Contamination of Fluids
- Distinguishing Blood Components in Saline/Clear Solutions



The Introtek Advantage

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

GENERAL CHARACTERISTICS/TECHNICAL DATA

Calibrate Input	Provides normalization for unique tube insertions.
Response Time	Blood detected in 100ms

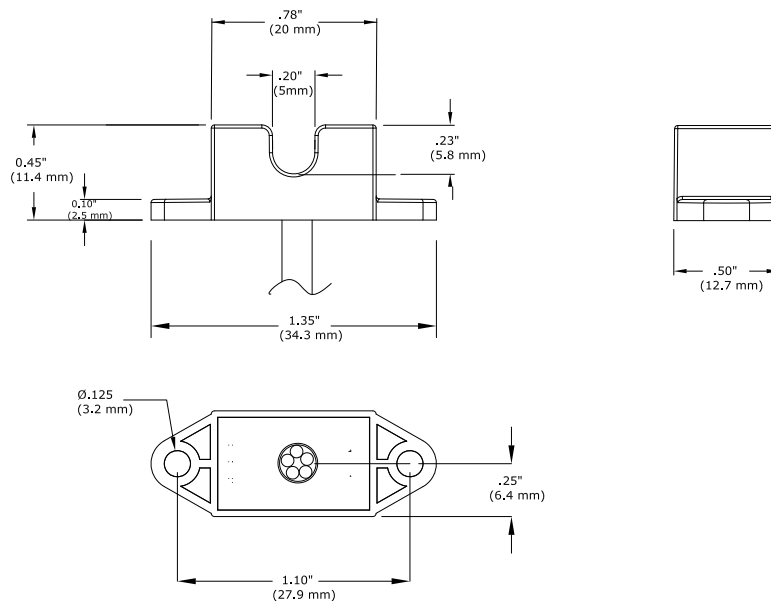
Please contact an Introtek Application Specialist to determine the optimal configuration for your application.

AVAILABLE OPTIONS

- Logic and analog output signals
- Alternative slot sizes (subject to engineering evaluation)
- Electronics available
- Electrical “reference design” available for easy integration

MECHANICAL SPECS

Dimensions in inches, (mm)



VALIDATION TESTING

The BC1 Miniature Blood Component Detector is designed to be tested in conjunction with the following specifications:

- **Electrical Fast Transients:** IEC 61000-4-4:2012
- **Radiated Emissions, Group 1, Class B:** CISPR 11
- **Electrostatic Discharge:** IEC 61000-4-2:2008
- **Radiated Immunity:** IEC 61000-4-3:2006
- **Power Frequency Magnetic Fields:** IEC 60601-1-2:2014 (4th 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.

INTROTEK®

Excellence in Ultrasonic Technology™

Introtek International
Corporate Headquarters
150 Executive Drive
Edgewood, New York 11717-9998 USA

t: 631.242.5425 | f: 631.242.5260 | e: info@introtek.com | w: www.introtek.com



©Copyright 2020 Introtek International. All rights reserved. Magnetrol, Introtek and Introtek logotype are registered trademarks of Magnetrol International, Inc. Performance specifications are effective with date of issue and are subject to change without notice.
Bulletin: 90-160 – Effective October 2020 – Supersedes MBCD.1, January 2016