

BLD

BLOOD LEAKAGE DETECTOR

■ **Teoresi MedTech Blood Leakage Detector** performs non-invasive optical detection of hemoglobin in fluid on clear tubing. It is intended to be used in blood management equipment, to detect unwanted hemoglobin and ensure the safety of the processes. A typical application is the detection of blood leakage from filters used in hemodialysis and similar applications.



Key features include:

- Microprocessor based operation
- Serial data communication, with complete set of commands
- Provides detection and adjustment for tube insertion and air vs. clear fluid
- No contact with fluid to be monitored

TECHNICAL DATA

Principle of operation	Optical attenuation measurement
Sensitivity	0.35 ml/min of blood with haematocrit level of 32 % in a clear fluid with flow rate of 500 ml/min (IEC 60601-2-16:2012)
Response time	500 ms
Requirements for tube	<ul style="list-style-type: none">▪ Size: 3,7 x 6,8 mm (inner/outer diameter)▪ Material: PVC NOTE 1: different tubing can be qualified on request NOTE 2: sterilization processes may alter optical response of tubes. Qualification shall be done after sterilization.
Standard references	Designed for use in devices to be tested according to the following standards: <ul style="list-style-type: none">▪ IEC 60601-1:2005+A1:2012+A2:2020▪ IEC 60601-1-2:2014+A1:2020▪ IEC 60601-2-16:2018 Operating software designed according to <ul style="list-style-type: none">▪ IEC 62304:2006+A1:2015 (Class C)
Temperature range	<ul style="list-style-type: none">▪ Operating temperature +0°C to + 70°C▪ Storage temperature -10°C to + 70°C
Protection provided by enclosure	IP 65 (when properly mounted on the hosting device)
Data interface	RS-485 (TIA/EIA-485A standard)
Power supply	5 V DC +/- 5%
Connectors	JST type PH connectors