

LB 6770

RUGGED RADIOMETRIC DETECTOR

SiPM Technology

The world's first, and most robust, radiometric detector using Silicon Photomultiplier (SiPM) technology.

Microprocessor controlled

Constant monitoring and control of the detector temperature, health, warning log, and bias voltage.

Fast response time

Features a fast 100 ms measurement cycle time.



Robust and water resistant

IP66, designed for a wide temperature range, wet environment, fully potted offering an unmatched mechanical robustness.

Temperature stable

Stable and reliable measurement even at high temperatures and with significant temperature fluctuation.

TECHNICAL DATA & FACTS

LB 6770

Detector

Application	Density or level
Work mode	Stand-alone or in combination with an LB 47x transmitter
Power supply	15 ... +28V DC, approximately 2.6 W
Temperature range	-20 ... +60 °C (-4 ... +140 °F) operational -20 ... +70 °C (-4 ... +158 °F) storage
Temperature stability	≤ 0.002 %/°C (-20 ... +60 °C)
Housing material	Stainless steel ISO 1.4301/AISI 304
IP protection	IP 66
Scintillator	NaI crystal; Ø 40 mm x 50 mm
Photomultiplier	Silicone based photomultiplier array
Dimensions	Ø 56 mm and 285 mm length
Weight	~ 3 kg
Electrical connection	Amphenol PT02 E10-6P
Outputs	0 – 10 V output 0/4 – 20 mA output
Communication	Modbus RTU or proprietary EROA protocol over RS 485
Electromagnetic flux tolerance	Tested up to 150 mT without signal degradation
Mechanical stability:	Tested to withstand vibrations from 2 to 1000 Hz and shocks up to 500 g
Environmental verification	ISO 13628-6 (subsea standard) concerning temperature, vibration, and shock

Special Features

- Industry-leading temperature stability for accurate and reliable measurements even at high temperatures and with significant temperature fluctuations
- Rugged design ensures long lifespan and maximum protection from the elements with stainless steel housing and IP66 protection
- Signal stability and accuracy even in the toughest conditions with electromagnetic flux tolerance tested up to 150 mT without signal degradation
- Unmatched reliability and serviceability with detector self-diagnostics and communication verification and a service and spare part program