HYPERLABS
Innovation at Hyperspeed since 1992

HL1101 Ruggedized USB TDR

Features and Technical Specifications

Rise Time (10-90%)	200 ps
Time Base Range	3 µs
Time Resolution	10.2 ps
Functional Range	200 m (400 m roundtrip)
Distance Resolution	Within ≈ 4 cm
Amplitude	+ 250 mV
Aberrations	+10%, -5%, total of 15% peak-to-peak in first 1 ns +3%, -3%, total of 5% peak to peak after 1 ns
Calibration	Internal, ± 1 Ω at 50 Ω
Time Base Accuracy	± 3%
Static Robustness	Complies with Class 2 of ESDS Component Sensitivity Classification (ESD STM5.1-1998)
Output Connector	1 x BNC
Interface	Powered and controlled via one USB cable
Included Software	ZTDR™ for Windows
Horizontal Scaling	Meters, feet, or time (ns)
Vertical Scaling	mV, Rho, normalized, impedance
Dielectric Constant	Selectable, 1.0 to 10.0
Dimensions	143.8 x 62.0 x 37.6 mm | 5.66″ x 2.44″ x 1.48″
Weight	218 g | 7.7 oz
Temperature Limits	0° to +40° C, operating | -40° to +85° C, storage
Warranty	1 year, see our website for details

PRODUCT SUMMARY

The HL1101 is an electrostatic-robust, USB-driven TDR suitable for deployment in a wide variety of lab, field, and industrial applications.

APPLICATIONS

- Impedance characterization in cables
- Fault detection and location in communications cables
- Time of flight and delay measurement
- Soil moisture measurement
- Water level and turbidity measurement

DEPLOYMENT NOTES

The HL1101 is the direct successor to the HYPERLABS HL8200 Series of TDRs and is suitable for the same applications.