

HL1101 Ruggedized USB TDR

Features and Technical Specifications

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| Rise Time (10-90%) | 200 ps |
| Time Base Range | 3 μ s |
| Time Resolution | 10.2 ps |
| Functional Range | 200 m (400 m roundtrip) |
| Distance Resolution | Within \approx 4 cm |
| Amplitude | + 250 mV |
| Aberrations | +15%, -5%, total of 20% peak-to-peak in first 1 ns +3%, -3%, total of 5% peak to peak after 1 ns |
| Calibration | Internal, \pm 1 Ω at 50 Ω |
| Time Base Accuracy | \pm 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.