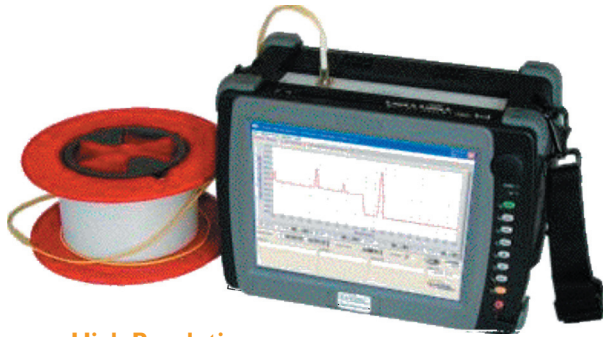


High Resolution OTDR

v-OTDR



High Resolution
OTDR

The digital sampling High Resolution Optical Time Domain Reflectometer (v-OTDR) is a revolutionary OTDR that finds optical fiber fault events with an unprecedented sub-cm resolution, resolves events as little as 10 cm apart, locates events starting from the panel connector (no front end deadzone), and provides excellent dynamic range. Unlike standard OTDRs, which use real time analog optical power detection, the v-OTDR uses photon counting technology for an all digital, deadzone-free OTDR. In addition, shorter pulses (sub ns) are used which improve the spatial resolution limitations found in standard OTDRs.

With excellent backscattering sensitivity, the v-OTDR can detect events such as macrobends, reflections, damages, reflections as low as -80 dB (on APC connectors for example) and insertion loss changes as low as 0.1 dB in connectors and splices. It is available in SMF, MMF, and POF models. Custom systems, non-telecom wavelengths, and/or non-standard fibers are also possible.

SPECIFICATIONS

Wavelength (standard)
SMF: 1310, 1550, 1625 nm
MMF: 650, 850 nm
POF: 500, 650, 830 nm
Total Dynamic Range: up to 35 dB, in windows of 17 dB (SMF/MMF) or 25 dB (POF)
Loss Accuracy: ± 0.1 dB
Reflectance Accuracy: ± 1 dB
Single Point Resolution: < 5 mm
Two-Point Resolution: 10 cm
Sampling Points: 64,000
Measurement Distance: up to 40 km, in windows of 200 to 800 m

General

Power Input: AC operation with 100 to 240 VAC, 50/60 Hz universal adapter or attached power supply.
Instrument Size: 330 x 180 x 250 mm
Instrument Weight: 7 kg
Operating Temperature: -5° to 40° C
Storage Temperature: -20° to 60° C
Relative Humidity: 0% to 90% noncondensing

APPLICATIONS

- Reliability testing
- Fiber optic sensors
- Signals intelligence
- Aerospace and automotive testing

ORDERING INFORMATION

| | |
|--------------|---|
| v-OTDR -1013 | Single-mode OTDR with 1310/1550/1625 nm wavelengths |
| v-OTDR -1022 | Multi-mode OTDR with 650/850 nm wavelengths |
| v-OTDR -1031 | POF OTDR with 650 nm wavelength |
| v-OTDR-1xxx | Custom system (<i>please contact factory</i>) |

Optical Connectors

| | |
|-----------|--|
| v-OTDR-UU | Universal connectors with FC/UPC and SC/UPC adapters |
| v-OTDR-UA | Universal connectors with FC/APC and SC/APC adapters |