

## OP1100 Discontinuity Analyzer

### A Complete Solution for Dropout Detection

As new optical fiber, optical connectors, and new applications for fiber are being developed, it is important for the performance of those new products to be quantified with regards to stressors they will realistically see in the field. Tests of tensile and torsional strengths as well as shock, drop, vibration, and heat stress tests in accordance with EIA/TIA-FOTP-32A and similar standards are common during the qualification process of new optical components. Often these tests require an ultra-high speed power meter to be able to properly characterize any discontinuities in the signal.

Unfortunately, many test sets used to test against these standards are either single channel, require integration of multiple pieces of equipment from different manufacturers, or are difficult to program. Often, engineers end up buying several optical-to-electrical converters with electronic samplers that each needs to be manually programmed and operate independently of each other. The possibilities for error increase as each separate device is added to the system.

### Testing with OptoTest's OP1100

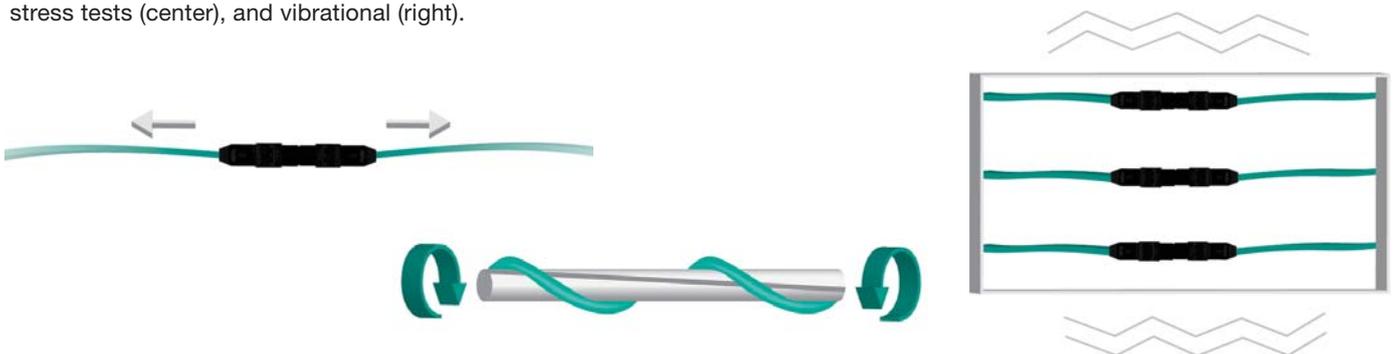


Model OP1100 16 Channel Discontinuity Analyzer and OP710 Multichannel Optical Power Meter

OptoTest's OP1100 has the distinction of being the only multichannel discontinuity tester on the market. With sampling rates up to 2.5MHz (0.4us per sample), a wide dynamic range, and selectable dropout thresholds, the OP1100 performs dropout testing on optical fiber ranging from single mode to POF. Its turnkey software allows the operator to set the dropout criteria, sampling rate, and saves all data to Excel files for easy analysis. The test set meets all necessary standards for vibration and shock failure tests, such as EIA/TIA-FOTP-32A, and works with our OP750 Multichannel Optical Sources or with an external optical source.

### Applications

Typical applications of the OP1100 (shown below) include the monitoring of optical power during tensile stress tests (left), torsion stress tests (center), and vibrational (right).





## OP1100 Discontinuity Analyzer

### Key Features

- Single mode/Multimode capable
- Input power range of -40dBm to -2dBm
- Selectable dropout detection range of 0.8µs to 1s
- Selectable loss threshold of 0.5dB to 3dB
- Bundled OPL-DISC application that records data directly into a spreadsheet
- USB Interface for seamless remote control
- Support of most common connector options (FC, ST, SC, etc.)

### Specifications

Optical Power Meter	Input power range: -2dBm to -40dBm Wavelength Range: 830nm to 1650nm
Optical Receiver	300µm InGaAs Detector >2MHz Bandwidth Linear amplifier output 0 to 2.5V
Discontinuity Detection	Event duration: >0.8µs to 1s Event amplitude: >= 0.5dB Sampling interval: 0.4µs Event trace: 750 samples
Data Interface	USB 1.1, USB 2.0 compatible data rate and interconnect
Operating Temperature Range	0°C to 50°C (32°F to 122°F)
Optical Interface	Fixed FC (others upon request)
Power Supply (order country specific)	US Standard or Euro Standard
Mechanical Dimensions	Standard 19" rack, 2U (16.8 x 3.8 x 10 inch)

Distribution in the UK & Ireland



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