

# OP-METS

## Multichannel Environmental Test Station

### Overview

OptoTest's **Multichannel Environmental Test System (OP-METS)** provides an optimized turnkey solution for environmental testing of up to 144 single mode or multimode fiber assemblies or passive components.

### Features

- Completely customized; built to meet customer requirements
- Facilitates environmental testing per **GR-326-CORE, GR-1435-CORE, Verizon FOC**
- Qualify single fiber (FC, SC, LC, etc) or multifiber connectors (MPO/MTP, MXC, PRIZM-LT, etc)
- Multimode and Single Mode wavelengths: 850 / 1300 / 1310 / 1490 / 1550 / 1625nm
- Multimode IL sources can be configured to meet IEC/TIA specifications (Encircled Flux) – *upon request*
- Mandrel-free Return Loss testing
- Can run up to two tests simultaneously (e.g. short term tests alongside ongoing long term tests)
- Used by industry leaders in fiber optic connector manufacturing, military, aviation, and academics
- Available in unidirectional and bidirectional configurations
- Power meter options include large area detector, multichannel power meter, integrating sphere, and remote head
- Compatible with all Windows operating systems after Windows XP, including Windows 8 and Windows 10



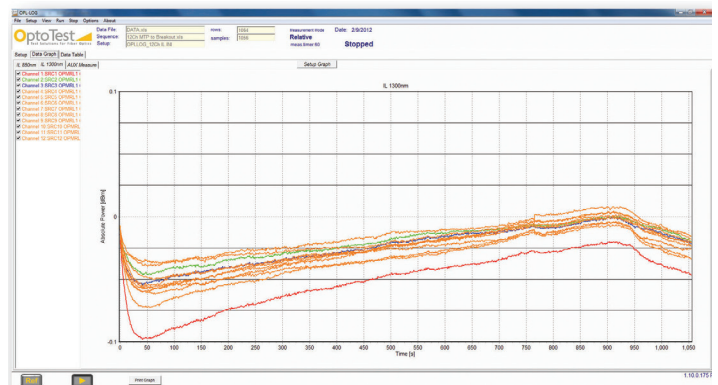
OP-METS Test Tower

### OPL-LOG

**OPL-LOG** is a data acquisition and logging software that controls OptoTest instruments via USB along with thermal chambers, thermocouples, and other auxiliary sensors\* for monitoring testing parameters. OPL-LOG provides graphs for IL, RL, and supported data acquisition devices and records the data in an Excel spreadsheet. This logging capability makes OPL-LOG well-suited for standards compliant long-term testing of fiber optic components. Tests can be configured to perform measurements at arbitrary, fixed time intervals over an arbitrary duration. For increased testing efficiency, OPL-LOG can run two simultaneous tests with different configurations on a single **OP-METS** system.\*\* The OP-METS system and the accompanying OPL-LOG software can be further customized for your application requirements.

\* Contact OptoTest for supported chambers and sensors.

\*\* Due to the physical configuration of the OP-METS system each measurement is performed sequentially.



OPL-LOG Data Logging Software showing a graph of the change in optical power over time.

# SPECIFICATIONS

OP-METS	Single Mode	Multimode
Source Channels	Up to 144 Channels ( <i>more upon request</i> )	
Insertion Loss Source ( $\pm 30\text{nm}$ )	1310nm, 1550nm 1490nm, 1625nm	850nm, 1300nm Launch Condition TIA compliant ( <i>upon request</i> )
Return Loss Source	1310nm, 1550nm 1490nm, 1625nm	850nm, 1310nm
Source Stability*	$\pm 0.02\text{dB}$	
Optical Power Meter Range	IN1: +10dBm to -80dBm IN3: +6dBm to -70dBm SI3: +3dBm to -70dBm IN5: +6dBm to -60dBm IN10: 0dBm to -45dBm	
Insertion Loss Accuracy**	$\pm 0.01\text{dB}$	
Return Loss Range	-10dB to -80dB	-10dB to -58dB
Return Loss Accuracy	$\pm 1\text{dB}$	
Channel Repeatability	$\pm 0.05\text{dB}$	

\* Per hour, per temperature variation of 1°C.

\*\* At constant temperature with less than 10dB power fluctuation.

## Laser Classifications

All **OP940 Insertion Loss and Return Loss Test Sets** utilize a **Class I Laser Source**. Unless otherwise noted, all **OP250**, **OP715**, and **OP750** source units with internal laser sources utilize a **Class I Laser Source**. Unless otherwise noted, all **OP815** and **OP850 Insertion Loss Test Sets** with internal laser sources utilize a **Class I Laser source**. All **OP280 Visual Fault Finder** units utilize a **Class III Laser Source**.

*OptoTest strongly suggests that all necessary precautions be taken whenever any Class I or Class III laser source is used.*

Specifications are subject to change, please confirm specific performance characteristics of the product at the time of ordering. All specifications are valid within temperature range of 18°C to 24°C unless otherwise noted. For additional specifications please contact OptoTest.