

OP712

USB Fiber Optic Power Meter

Overview

USB Fiber Optic Power Meter

The **OP712** is a standalone USB powered and operated power meter. It can be integrated into the test and measurement process with any OptoTest Applications.

Absolute power and insertion loss (IL) are accurately measured with this USB power meter when used in conjunction with the corresponding software such as OPL-LOG and OPL-MAX. It is ideal for measuring fibers terminated with simplex connectors such as LC, SC or FC. The **OP712** can also be used for high density connectors such as MTP or MPO.

An **OP712** outfitted with a large area detector can be used to test high density connectors such as MTP/MPO.

The LAAD series of adapters offer a quick-change magnetic interface and is available for all standard connector options.

Using the OPL-SDK, the user can write custom applications to control the OP712.

Features

- Measurement range
 - InGaAs: 1mm, 3mm, 5mm and 10mm
 - Silicon: 3mm
 - High Power InGaAs: 2mm
- Remote head is ideal for rugged cables and ergonomic in manufacturing environments
- Calibration factors stored directly within the OP712
- System integration with OPL series software suite.
- Adapters available for universal ferrule sizes (1.25/1.6/2.0/2.5mm) and common connector types such as MTP/MPO, MT Ferrule, MT-RJ, LC, FC, SC, PRIZM-LT, MXC etc.
- Bare fiber adapters available for simplex or ribbon fiber
- 0.02dB relative accuracy when optical loss is less than 10dB



Model OP712-IN5 with LAAD-FC Adapter



SPECIFICATIONS

Optical Power Meter	1mm InGaAs	3mm InGaAs	5mm InGaAs	10mm InGaAs	3mm Silicon
Measurement Range	+6dBm to -72dBm at 1490nm	+3dBm to -72dBm at 1490nm	0dBm to -65dBm at 1490nm	0dBm to -55dBm at 1490nm	0dBm to -65dBm at 980nm
Wavelength Range	850nm to 1650nm				400nm to 1100nm
Selectable Wavelength	Standard wavelengths (850nm, 980nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm)				Standard wavelengths (650nm, 850nm, 980nm)
Measurement Resolution (Display)	0.001dB				
Absolute Accuracy	±0.25 dB at calibration conditions for all NIST traceable wavelengths				
Measurement Linearity (Relative Accuracy)					
Deviation ± 0.05dB	+3dBm to -65dBm at 1490nm	0dBm to -65dBm at 1490nm	0dBm to -55dBm at 1490nm	0dBm to -45dBm at 1490nm	0dBm to -55dBm at 980nm
Deviation ± 0.01dB	<10dB power variation	<10dB power variation	<10dB power variation	<10dB power variation	<10dB power variation

Return Loss	1310nm/1550nm	1310nm/1490nm/1550nm/1625nm	850nm/1300nm
Source Wavelength	1310nm, 1550nm	1310nm, 1550nm, 1490nm, 1625nm	850nm, 1300nm
Calibrated Measurement Range	-10dB to -80dB	-10dB to -80dB	-10dB to -58dB
Measurement Linearity	±1dB (-12dB to -72dB)	±1dB (-12dB to -72dB)	±1dB (-10dB to -45dB)
Distance Range	100 meters (standard)/ 2500 meters (Rep Rate adjusted)	100 meters (standard)/ 2500 meters (Rep Rate adjusted)	100 meters (standard)/ 2500 meters (Rep Rate adjusted)

Insertion Loss	1310nm/1550nm LASER	1310nm/1490nm/1550nm/1625nm LASER	850nm/1300nm LED
Source Center Wavelength	±30nm from nominal	±30nm from nominal	±30nm from nominal
Source Bandwidth	<10nm	<10nm	<140nm
Internal Fiber	9/125µm (SMF28)	9/125µm (SMF28)	50/125µm, 62.5/125µm, 105/125µm
Launch Condition	N/A	N/A	Available upon request
Output Power	Typical -1.5dBm	Typical -2.5dBm	-18dBm: 62.5/125µm
Source Stability*	±0.02dB	±0.02dB	±0.02dB

* Over 1 hour with a max. change of 1°C

Laser Classifications

All **OP930 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.