

Multichannel Source



Overview Multichannel Source

The OP750 multichannel source can be configured with a mix of up to 24 individual or switched LED or LASER sources. Single wavelength LED source, available in 850nm or 1300nm, features an internal large core fiber to guarantee an overfill condition for 62.5/125µm or 50/125µm multimode fiber. The single wavelength sources at 1310nm and 1550nm are terminated with standard 9/125µm fiber. A dual wavelength option, such as 1310nm and 1550nm, into a single port is available as well (12 channel version only). To create dual wavelength operation on any channel, an optical switch can be added to the configuration, and represent a great cost savings.



Model OP750 Multichannel Source



Multichannel LED Source

- Up to 24 LED sources in one rack
- Factory configurable wavelength mix, including 650nm, 850nm, and 1300nm
- Adjustable power level from 0% to 100% either through front panel or USB port
- Controlled launch condition, customer specific, Encircled Flux (EF) available
- Dual wavelength operation with optional internal 1xN precision optical switch
- Support of most common connector options (FC/PC, ST/PC, SC/PC, etc)

Multichannel LASER Source

- Up to 24 LASER sources in a single rack or up to 12 dual wavelength (1310/1550) sources
- Factory configurable wavelength mix, including 1310nm, 1490nm, 1550nm, 1625nm, and 850nm VCSEL
- Adjustable power level up to 10dBm (depending on laser) either through front panel or USB port
- Cost effective solution with optional, highly repeatable built-in optical switch
- Support of most common connector options (FC, ST, SC, LC, etc...)

OptoTest Corp. 4750 Calle Quetzal Camarillo, CA 93012 Doc: DSOP750 Rev. B 1/23/15 **OP750**

OptoTest

Multichannel Source

Configurations

Multichannel Source Standard Configuration

For best stability and measurement speed each channel is equipped with a dedicated source (Laser or LED). With this option, it is still possible to have each port configured for dual wavelength operation.

Multichannel Source with Internal Optical Switch

For high channel counts or certain types of sources, the option of an internal precision optical switch is an economical solution.

OP750			
	Laser	_	••••
	Laser		••••
	Laser		••••
	Laser	-	••••
	Laser	_	••••





Note: Additional options such as an internal source bypass switch or other custom solutions are available as well.

> 1.805.987.1700 sales@optotest.com engineering@optotest.com

OptoTest Corp. 4750 Calle Quetzal Camarillo, CA 93012 Doc: DSOP750 Rev. B 1/23/15

SPECIFICATIONS

variation



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) (650nm, 850nm, 980nr					
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	<10dB power	<10dB power	<10dB power	<10dB power	

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)

variation

variation

variation

variation

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 II 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.

OptoTest Corp. 4750 Calle Quetzal Camarillo, CA 93012 Doc: PS-GENSPECS Rev.A 11/19/14