Fiber Optic Light Sources

Multimode
Singlemode

OPTICAL WAVELENGTH LABORATORIES

Customer Name John Smith — Date of Calibration April 25, 2006
Report Number 2917 — Date of Next Calibration April 25, 2006
Meter Serial Number FO49999 — Calibrated by Robert Best
Source Serial Number WSA1899 — Temp. 72°F — Rel. Hum. (%) 30%
Transfer Standard ID FO21172 — Technician's Signature

NIST # 814342

Optical Light Source Certificate of Calibration

Wavelength	850 nm	1300 / 1310 nm	1550 nm
Coupled Power	-20.0 dBm	-20.0/-10.0 dBm	-10.0 dBm
Fiber Core Diameter	62.5 / µM	62.5 / 9 µM	9 µM
Connector Style	SC	SC / SC	SC

Optical Power Meter Certificate of Calibration

Wavelength	850 nm	1300 / 1310 nm	1550 nm
Transfer Standard	-10.0 dBm	-10.0 dBm	-10.0 dBm
Before Calibration			
After Calibration	-10.0	-10.0	-10.0

Range Check	0 dBm N/A	-10 dBm -10.00	-20 dBm -20.00
1300 nm	-30 dBm -30.00	-40 dBm -40.00	-50 dBm -50.00

N.I.S.T. TRACEABLE

WaveSource Series Light Sources can be bundled with a Fiber OWL or WaveTester optical power meter for accurate automatic dual wavelength optical power and loss measurements in both multimode and singlemode fiber links. See page 2 for more details about Fiber OWL Series kits, and page 6 for WaveTester Series kits.

Description

WaveSource series fiber optic light sources offer the fiber optic professional a wide range of options for their testing needs. Several combinations are available: multimode only, singlemode only, or both multimode and singlemode. Our quad-wavelength version (WS-MDSD) has all four wavelengths (850, 1300, 1310, 1550) in one unit! Visual Fault Locators (VFL) can also be added to multimode only and singlemode only versions. VFLs can be used in both multimode and singlemode fibers. All versions of the WaveSource have two transmission modes: Continuous Wave (CW) for accurate temperature-stabilized fiber optic tests; and modulated mode. Modulated mode provides for an auto-testing function when used with the Fiber OWL 4 or WaveTester optical power meters. The modulated signal from the WaveSource tells the power meter to switch to the currently selected wavelength, which eliminates much of the guesswork during tests, and saves valuable time. WaveSource series light sources provide high output and stability at an economical price. The sources provide temperature-compensated outputs, and have an intuitive 4-button interface with controls for power, transmission mode, wavelength, and auto-test mode. LED indicators highlight the selected source and verify that battery power is sufficient to maintain the calibrated output power. WaveSource light sources come configured with your choice of SC, ST, or FC connector ports, as well as a protective rubber boot, carrying strap, 9-volt battery, NIST-traceable certificate of calibration, and CD-ROM with operations manual.

Ordering Info

WS-MDxx	WaveSource MM (850/1300nm)	545.00
WS-MDVxx	WaveSource MM w/VFL port (850/1300nm & 650nm VFL)	745.00
WS-SDxx	WaveSource SM (1310/1550nm)	1295.00
WS-VSDxx	WaveSource SM w/VFL port (1310/1550nm & 650nm VFL)	1495.00
WS-MDSDxx	WaveSource Quad (850/1300-MM & 1310/1550-SM)	1900.00

If the part number above contains 'xx', please specify 'ST' or 'SC' depending upon your required connector type.

Specifications

Light Source

Center Wavelength	
850	850 +30 / -10 nm
1300	1300 ± 50 nm
1310	1310 ± 20 nm
1550	1550 ± 30 nm
Spectral Width	
850	50 nm
1300	180 nm
1310	2 nm
1550	2 nm
Output Power	
multimode	-20.0 dBm (LED)
singlemode	-10.0 dBm (FP laser)
Output Modes	Continuous Wave / Modulated

Visual Fault Locator

Center Wavelength	~650 nm
Output Type	Red fiber optic laser
Output Power	-2.0 dBm or greater
Output Modes	Continuous Wave/Modulated
Visual Range	up to 5 kilometers (3.1 miles)