

# Wavelength Stabilized Laser Source, Benchtop

The Optilab WSL series are high power FGB stabilized laser sources in bench top housing.

WSL Wavelength Stabilized Laser Source, Benchtop



## Product Description

The Optilab WSL series are high power FBG stabilized laser sources in bench top housing. They are designed for general laboratory applications. The WSL is a reliable and cost effective FBG stabilized laser source for providing up to 4 FBG wavelengths. With Optilab's comprehensive inventory of high quality lasers including Fiber Bragg Grating (FBG) filters, the WSL can be ordered from a large variety of wavelengths. WSL lasers' operating temperature and drive current are precisely monitored by micro-controller to ensure constant output power and emission wavelength stability.

Using its intuitive front panel or an optional RS-232 interface, the user can control the WSL output power level by adjusting the laser drive current and emission wavelength. Optilab WSL Laser Source products are constructed with Telcordia-qualified laser to ensure 15+ years of operating life, backed by a industry leading three year warranty.

## Features

- Up to 4 Wavelength per Source
- Up to 500 mW output
- Wavelength Stability of  $\pm 0.05$  nm
- Available in 980 nm to 1500 nm
- PM output available in most Wavelengths
- RS-232 Control Interface
- Three Year Limited Warranty

## Applications

- Laboratory Testing and Measurement
- EDFA/Raman Pump Applications
- Seed Laser
- Fiber Optics Components

## PRODUCT SPECIFICATIONS

### Technical Specifications

Number of Lasers	Up to 4 Lasers in One Unit
Wavelength Range	See table on reverse side, 980 nm to 1500 nm
Center Wavelength Accuracy (with FBG only)	$\pm 1.0$ nm
Output Power	Up to 500 mW, depending on wavelength
Output Power Stability	$\pm 0.1$ dB over 8 Hours
Wavelength Accuracy	$\pm 0.05$ nm over 8 Hours
Laser Linewidth	1 nm max.
Optical Isolator	30 dB (optional)
Polarization Extinction Ratio	20 dB typ. (with PM fiber Option)

### Adjustable Features and Output

Channel Output Control	On/Off
Power Output	Up to 6 dB Adjustment of Peak Power Output

### Ordering Information

#### WSL-w-B-xxx-y-zzzz

w	Number of Lasers
xxx	Optical Power Level (mW)*
y	Fiber Type S, Single Mode Fiber; P, PM Fiber*
z <sub>1</sub> -z <sub>2</sub> -z <sub>3</sub> ...	Wavelength*

\*Please see second page for complete available ordering options.



**Optilab**

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Product specifications and description are subject to change without notice.  
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## Available Ordering Options for WSL

Center Wavelength	Max Output Power	Output Fiber Type
980 nm	500 mW	SM
1064 nm	200 mW	SM, PM
1425 nm	250 mW	SM, PM
1426 nm	300 mW	SM, PM
1440 nm	250 mW	SM, PM
1443.5 nm	250 mW	SM, PM
1444 nm	200 mW	SM, PM
1444 nm	200 mW	SM, PM
1446 nm	200 mW	SM, PM
1455 nm	200 mW	SM, PM
1457nm	200 mW	SM, PM
1462 nm	250 mW	SM, PM
1467 nm	200 mW	SM, PM
1471 nm	250 mW	SM, PM
1480 nm	300 mW	SM, PM
1480 nm	200 mW	SM, PM
1487 nm	200 mW	SM, PM
1490 nm	250 mW	SM, PM
1495 nm	200 mW	SM

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### Mechanical Specifications

Temperature Range	10° C to +50° C (operating), -10° C to +70° C (storage)
Operating Humidity	0% to 85% Relative Humidity
Power Supply	80 – 240 V, 43 – 63 Hz AC or 40 - 58 V DC (Optional)
Power Consumption	50 W max.
Housing Dimensions	Benchtop, 16.5" x 12.5" x 5.25"
Control / Monitoring	LD Current, Output Power
Remote Control	RS-232 via DB-9 Connector
Display	LD Current, Output Power
Optical Connectors	FC/APC, FC/UPC, SC/APC, SC/UPC PM FC/APC, PM FC/UPC
Optical Fiber Type	SMF-28 (Standard), PANDA for PM Output
Housing	Solid Cast Aluminum



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