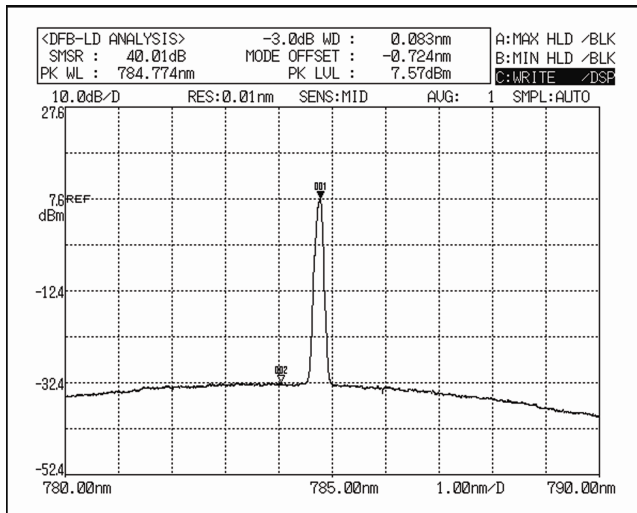


Spectrum Stabilized Raman Laser Subsystems

➤ Laser Subsystem Features

- >350 mW Fiber Coupled Output Power
- Spectral Linewidth < 0.15 nm
- Ultra-narrow Spectral Linewidth option 1 cm^{-1}
- Temperature Stabilized Spectrum (< 0.007 nm/ $^{\circ}\text{C}$)
- Low Power consumption (< 5.5 W)
- 40 dB SMSR Typical
- 3" x 2.5" x 0.69" Package Weighing < 4 oz



Typical Spectral Plot

Laser features high output power with narrow spectral bandwidth. The laser's stabilized peak wavelength remains "locked" regardless of case temperature (-10 to +55 deg. C). Devices can be spectrally tailored to suit application needs and offer side mode suppression ratios (SMSRs) better than 40 dB, thereby providing extremely high signal to noise ratio and making these sources ideal for Raman spectroscopy and pump laser applications. The laser is integrated with high performance laser drive and temperature control electronics in a compact package weighing less than 4 oz.

Parameter	Unit	Min	Typ	Max	Notes
Optical output power	mw	350	375		
Output power stability	%		± 1		
Peak wavelength	nm	784.5	785	785.5	
3 dB bandwidth (FWHM)	nm		0.1	0.15	
Peak wavelength drift	nm			± 0.10	over life
Optical signal-to-noise ratio (SMSR)	dB	35	45		
Warm-up time	sec			10 / 1.5	cold/warm start

Item	Description
	Miniature Laser Subsystems for Raman Spectroscopy
SSR-Laser-785-350	Spectrum Stabilized Laser Subsystem @ 785nm with <4 cm^{-1} resolution, 350mw
SSR-Laser-785-500	Spectrum Stabilized Laser Subsystem @ 785nm with <4 cm^{-1} resolution, 500mw



www.laser2000.com

GER/AT/CH
 Laser 2000 GmbH
 82234 Wessling
 Tel. +49 8153 405-0
 info@laser2000.de
 www.laser2000.de

NORDICS
 Laser 2000 GmbH
 SE-112 51 Stockholm
 Tel: +46 8 555 36 235
 info@laser2000.se
 www.laser2000.se

FRANCE
 Laser 2000 SAS
 33600 Pessac
 Tel. +33 5 57 10 92 80
 info@laser2000.fr
 www.laser2000.fr

IBERIA
 Laser 2000 SAS
 28034 Madrid
 Cell +34 650 529 806
 info@laser2000.es
 www.laser2000.es

Laboratory Laser Source for Raman Spectroscopy

Designed for use in the laboratory, the user configurable **Lab-LS** laser system provides a turn-key solution with integral laser drive and TEC control electronics, and offers the user the ability to adjust the laser drive current from either the front panel or remotely.

The module has a digital readout for easy set point adjustment, an independent master power key switch and laser enable switch, a remote interlock, and an Emergency Power Off (EMO) pushbutton.

The **Lab-LS** can be ordered with SMA905 or FC/PC or FC/APC bulkhead for easy patch cord attachment. The unit comes complete with an integral AC/DC power supply.

User interchangeable Lab-LS laser modules can be ordered with a variety of standard Raman wavelengths with either single mode (Polarization Maintaining) or multi-mode fiber coupled output.



The **Lab-LS** is a controller mainframe that lets you change in and out laser subsystem modules at will. This fully turn-key unit is **UL/CE & IEC approved**. The **Lab-LS** system provides the ability to adjust laser output power by turning a dial on the front panel and reading out the LED readout.

The small size and AC/DC operating power allows for great portability and use around the Lab or in the Field! The ultimate benefit is having a laser source that can be quickly switched to handle a different Raman wavelength for excitation. A specific sample type may have too much fluorescence at 785nm, however swapping to a 1064nm laser subsystem solves this problem.

Item	Description
Lab-LS-785	Laboratory Laser Source mainframe with one SSR-Laser-785-350
SSR-Laser-785-350	Additional Laser Subsystem @ 785nm with $<4 \text{ cm}^{-1}$ resolution, 350mw
SSR-Laser-785-500	Additional Laser Subsystem @ 785nm with $<4 \text{ cm}^{-1}$ resolution, 500mw



www.laser2000.com

GER/AT/CH
Laser 2000 GmbH
82234 Wessling
Tel. +49 8153 405-0
info@laser2000.de
www.laser2000.de

NORDICS
Laser 2000 GmbH
SE-112 51 Stockholm
Tel: +46 8 555 36 235
info@laser2000.se
www.laser2000.se

FRANCE
Laser 2000 SAS
33600 Pessac
Tel. +33 5 57 10 92 80
info@laser2000.fr
www.laser2000.fr

IBERIA
Laser 2000 SAS
28034 Madrid
Cell +34 650 529 806
info@laser2000.es
www.laser2000.es