

Dual Wavelength Narrow Linewidth Laser System



Dual wavelength narrow linewidth laser system is RealLight's speciality product, it provides two wavelengths from one single fiber. The system features compact structure, portable design and uses Volume bragg gratings (VBG) locking wavelength perfectly, PD feedback and built-in semiconductor cooling element can help ensure excellent power stability and narrow spectral bandwidth output.

Key Features

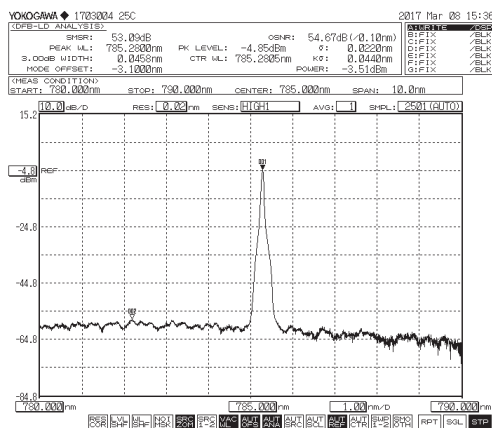
- ◆ Narrow Linewidth < 0.1nm (FWHM)
- ◆ Excellent wavelength stability $\pm 0.005 \text{ nm}@8\text{H}$
- ◆ Dual wavelength output from single fiber
- ◆ Temperature Stabilized Spectrum ($< 0.007 \text{ nm}/^\circ\text{C}$)
- ◆ Excellent power stability $\pm 1\%$
- ◆ Contains PC control, emergency stop button, short circuit protection functions

Standard Wavelengths

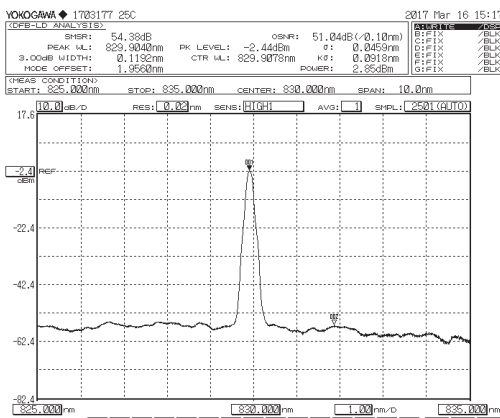
- 784 / 785nm
- 785 / 830nm
- 785 / 1064nm

Applications

- Confocal Microscope
- Raman spectroscopy
- Super resolution microscopy
- Bioinstrumentation

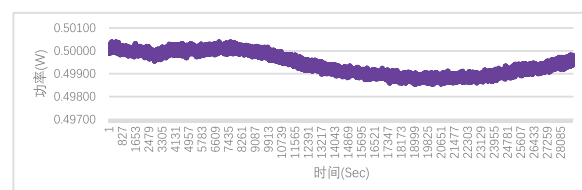


785nm Laser Spectrum



830nm Laser Spectrum

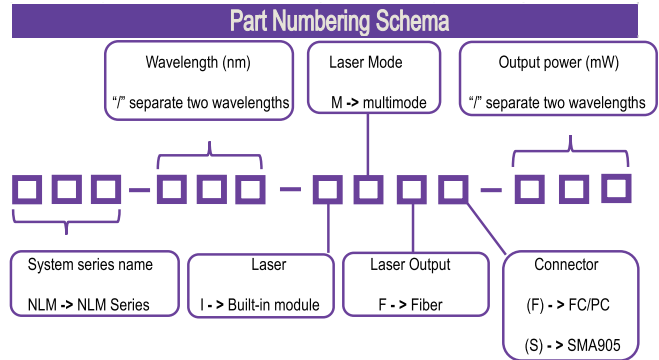
Optical Parameters			
Center Wavelength(nm)	784/785	785/830	785/1064
Output Power(mW)	>500 (each wavelength)		
Wavelength Tolerance(nm)	± 0.5 (each wavelength)		
Linewidth (nm)	<0.1 (each wavelength)		
Wavelength Stability	$\pm 0.005 \text{ nm}@8\text{H}$		
Power Stability	$\pm 1.0\%$ @8H		
SMSR	40dB		
System Parameters			
Adjustability%full Power	0~100%		
Warm up Time	15 min		
Modulation Input	1 KHz TTL or analog0~5V		
Control Interface	USB,BNC		
Connector	SMA905, FC/PC		
Output Fiber	105 um, 0.22 NA		
Supply Voltage	100-240VAC,50/60Hz		
Power Consumption	<7 W		
Storage Temperature	$-10\sim 60^\circ\text{C}$		
Storage Humidity	0~80% RH		
Operating Temperature	$10\sim 35^\circ\text{C}$		
Weight	2.5 Kg		
Dimensions	150X102X200 mm		



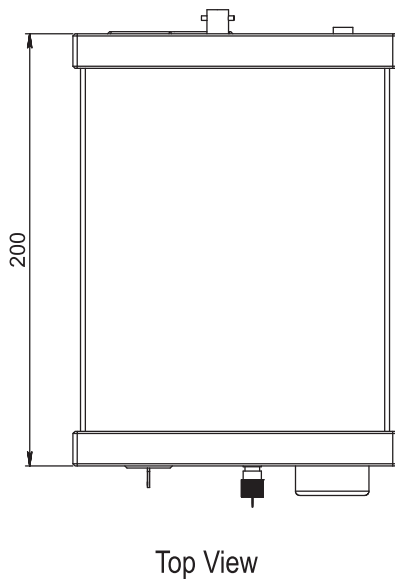
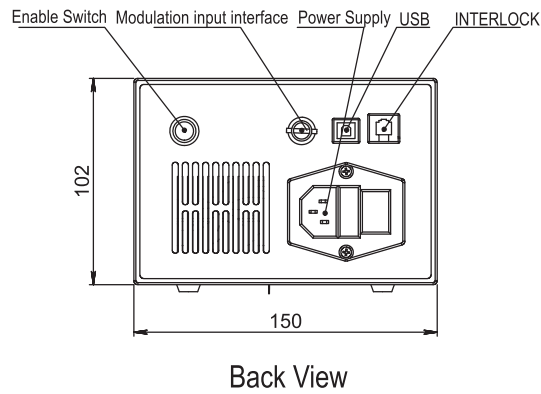
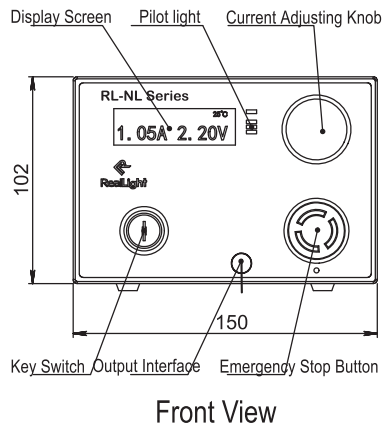
785nm Power Stability@8H

Ordering Information

NLM Series Model List			
Wavelength(nm)	Power (mW)	Part Number	Connector
784/785	500/500	NLM-784/785-IMF(S)-500/500	SMA905
784/785	500/500	NLM-784/785-IMF(F)-500/500	FC/PC
785/830	500/500	NLM-785/830-IMF(S)-500/500	SMA905
785/830	500/500	NLM-785/830-IMF(F)-500/500	FC/PC
785/1064	500/500	NLM-785/1064-IMF(S)-500/500	SMA905
785/1064	500/500	NLM-785/1064-IMF(F)-500/500	FC/PC



Mechanical Specifications



Unit: mm