

NLM Series Multi-mode Narrow Linewidth Laser



The NL series narrow linewidth diode lasers are RealLight's self-developed wavelength-stabilized lasers, deliver high output power and excellent stability at 532nm, 638nm, 784nm, 785nm, 808nm, 830nm, 981nm or 1064nm output wavelengths, with power ranging from 100mW to 800mW.

Key Features

- ◆ Linewidth < 0.1nm
- ◆ Excellent wavelength stability $\pm 7\text{pm}@4\text{h}$
- ◆ SMSR is better than 40dB
- ◆ Built-in TEC, power stability $\pm 2\%$
- ◆ Contains PC control, emergency stop button functions
- ◆ Raman analysis software available

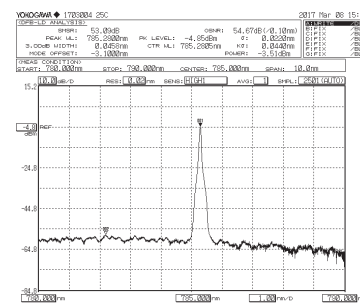
Technical Specifications

Optical Parameters							
Center Wavelength (nm)	532*	638	785	808	830	981	1064
Output Power (mW)	100	500	500	600	500	800	800
Wavelength Tolerance (nm)	±0.5						
Linewidth (nm)	<0.1	<0.1	<0.1	<0.3	<0.1	<0.3	<0.1
Wavelength Stability (typ., @4h)	±5 pm	±7 pm					
Power Stability (typ., @4h)	<3%(RMS)	±2%(P-P)					
SMSR	-	>35	>40				
System Parameters							
Adjustbility % Full Power	0~100%						
Warm up Time (min)	15						
Modulation Input	Analog signal 0~5V						
Control Interface	USB, SMA						
Connector	SMA905, FC/PC						
Output Fiber	105 μm, 0.22 NA						
Supply Voltage	+12VDC						
Power Consumption	<20W typ.						
Storage Humidity	0~80% RH						
Storage Temperature (°C)	-10~60						
Operating Temperature (°C)	10~35						
Weight (kg)	1.2						
Dimensions (mm)	180×102×180.2						

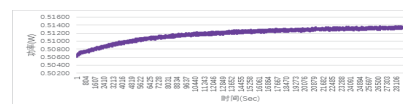
1. *532nm is diode pumped solid-state laser.
2. Higher power options available upon request.
3. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

Applications

- Raman spectroscopy
- Laser-induced fluorescence
- Pumping source



785nm laser spectrum (SMSR>40dB)

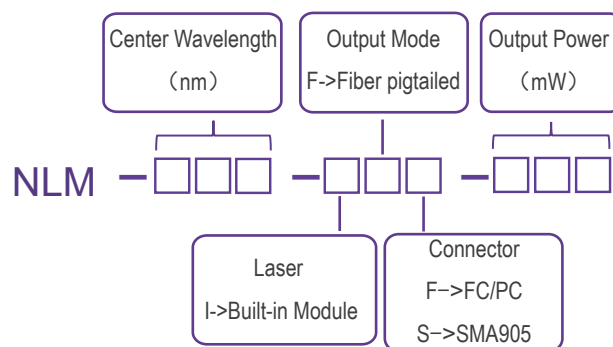


785nm power stability@4h

Ordering Information

Wavelength (nm)	Output Power (mW)	Part Number	Connector
532	100	NLM-532-IF(F)-100	FC/PC
	100	NLM-532-IF(S)-100	SMA905
638	500	NLM-638-IF(F)-500	FC/PC
	500	NLM-638-IF(S)-500	SMA905
785	500	NLM-785-IF(F)-500	FC/PC
	500	NLM-785-IF(S)-500	SMA905
808	600	NLM-808-IF(F)-600	FC/PC
	600	NLM-808-IF(S)-600	SMA905
830	500	NLM-830-IF(F)-500	FC/PC
	500	NLM-830-IF(S)-500	SMA905
981	800	NLM-976-IF(F)-800	FC/PC
	800	NLM-981-IF(S)-800	SMA905
1064	800	NLM-1064-IF(F)-800	FC/PC
	800	NLM-1064-IF(S)-800	SMA905

Part Numbering Schema



Mechanical Drawings (mm)

