

NLMO Series Dual-wavelength Narrow Linewidth Laser



Key Features

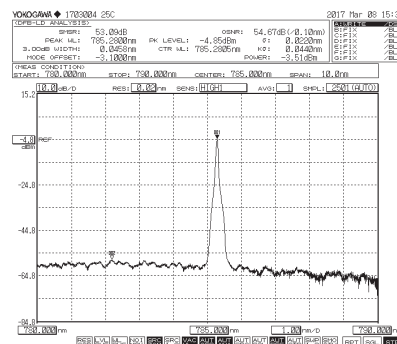
- ◆ Switch output between two wavelengths
- ◆ Excellent wavelength stability $\pm 7\text{pm}@4\text{h}$
- ◆ Built-in TEC, typical power consumption $< 5\text{W}$
- ◆ Compact design
- ◆ USB and I/O interface are available

Applications

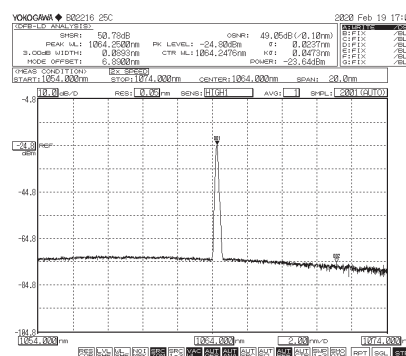
Raman spectroscopy Bio-instrumentation

Technical Specifications

Optical Parameters						
Center Wavelength (nm)	532/785		784/785		785/1064	
Output Power (mW)	100	500	500	500	500	800
Wavelength Tolerance (nm)	± 0.5 (each wavelength)					
Linewidth, each wavelength (nm)	< 0.1					
Wavelength Stability	$\pm 7\text{pm}@4\text{h}$ Typ.					
Power Stability	$\pm 2\%$ @4h Typ.					
SMSR	-		40dB			
System Parameters						
Adjustibility % Full Power	0~100%					
Warm up Time (min)	15					
Control Interface	PH2.0-12P, USB					
Connector	FC/PC, SMA905					
Output Fiber	105 μm , 0.22 NA					
Supply Voltage	5VDC/2A					
Power Consumption	$< 5\text{W}$ Typ.					
Storage Humidity	0~80% RH					
Storage Temperature ($^{\circ}\text{C}$)	0~55					
Operating Temperature ($^{\circ}\text{C}$)	10~35 (heat sink is required)					
Weight (g)	< 150					
Dimensions (mm)	86 \times 63.5 \times 32					



785nm laser spectrum
(SMSR > 40dB)

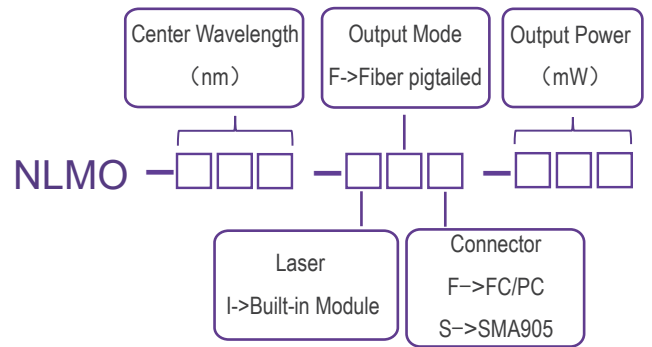


1064nm laser spectrum
(SMSR > 40dB)

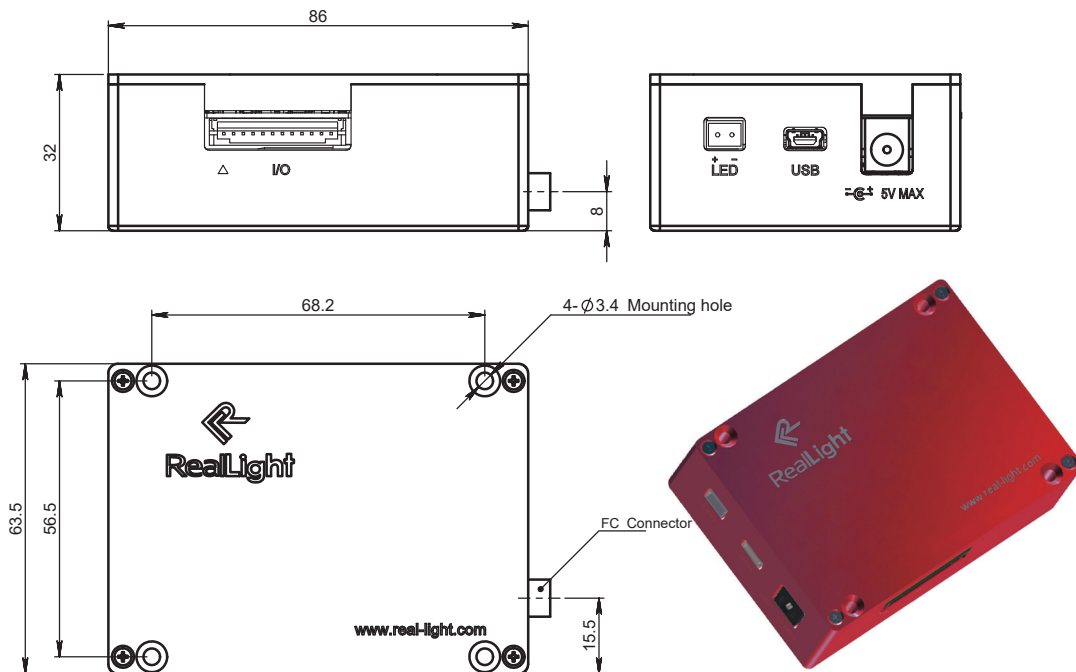
Ordering Information

Wavelength (nm)	Output Power (mW)	Part Number	Connector
532/785	100/500	NLMO-532/785-IF(S)-100/500	SMA905
	100/500	NLMO-532/785-IF(F)-100/500	FC/PC
784/785	500/500	NLMO-784/785-IF(S)-500/500	SMA905
	500/500	NLMO-784/785-IF(F)-500/500	FC/PC
785/1064	500/800	NLMO-785/1064-IF(S)-500/800	SMA905
	500/800	NLMO-785/1064-IF(F)-500/800	FC/PC

Part Numbering Schema



Mechanical Drawings (mm)



Pin Descriptions		
PIN	Function	Description
1	+5V	5VDC/2A
2	+5V	5VDC/2A
3	GND	Input Power Ground
4	GND	Input Power Ground
5	LD1_INTERLOCK	Set to high-level to enable LD1, low-level or suspend to disable LD1
6	LD2_INTERLOCK	Set to high-level to enable LD2, low-level or suspend to disable LD2
7	GND	Signal Ground
8	LD1 External Power Control	Analog signal 0-1.2V to control output power from 0% to 100%
9	LD2 External Power Control	Analog signal 0-1.2V to control output power from 0% to 100%
10	PD1_Power Monitor	PD1 feedback signal, 0.5V for 500mW
11	PD2_Power Monitor	PD2 feedback signal, 0.5V for 500mW
12	RT Monitor	Rt signal level, 1.25V for 25°C

