

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 < 5W
- ◆ Compact design
- ◆ USB and I/O interface are available

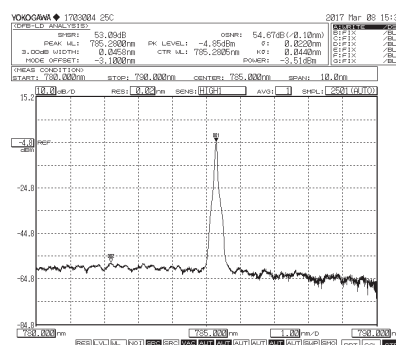
Applications

Raman spectroscopy Bio-instrumentation

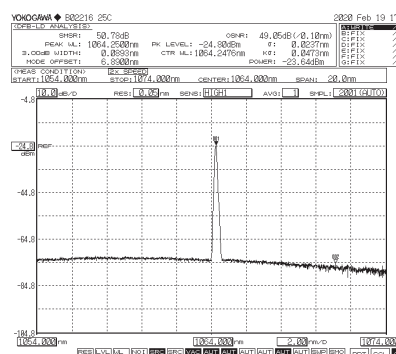
Technical Specifications

Optical Parameters				
Center Wavelength (nm)	784/785		785/1064	
Output Power (mW)	500	500	500	800
Wavelength Tolerance (nm)	±0.5 (each wavelength)			
Linewidth (nm)	<0.1 (each wavelength)			
Wavelength Stability (typ., @4h)	±7 pm			
Power Stability (typ., @4h)	±2%(P-P)			
SMSR	40dB			
System Parameters				
Adjustability % 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 (typ., W)	<5			
Storage Humidity	0~80% RH			
Storage Temperature (℃)	-25~55			
Operating Temperature (℃)	10~35 (heat sink is required)			
Weight (g)	<150			
Dimensions (mm)	86×63.5×32			

All the data in the above table are the typical values obtained from the tests at room temperature of 25 $^{\circ}\text{C}$, and the final data is subject to the final test report.



785nm laser spectrum
(SMSR>40dB)

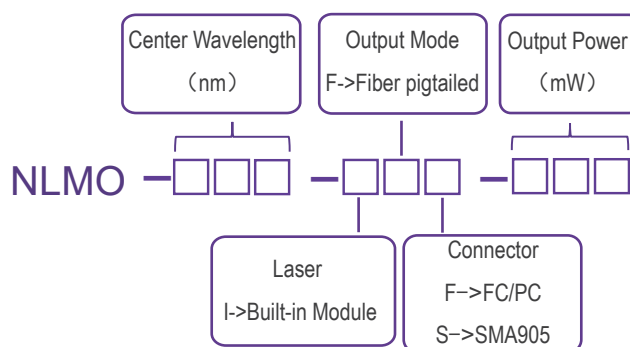


1064nm laser spectrum
(SMSR>40dB)

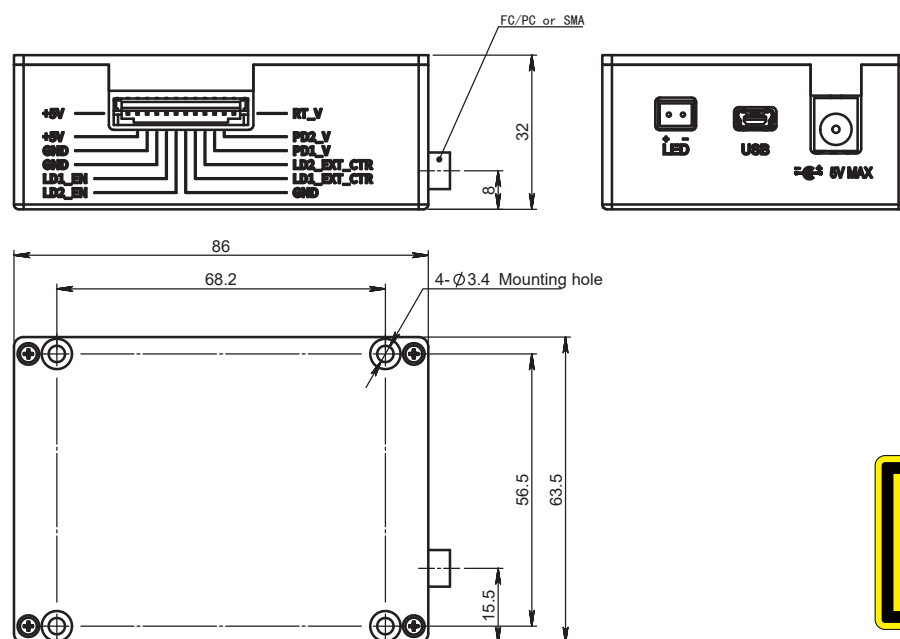
Ordering Information

Wavelength (nm)	Output Power (mW)	Part Number	Connector
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