NLMO Series Dual-wavelength Narrow Linewidth Laser

Key Features

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

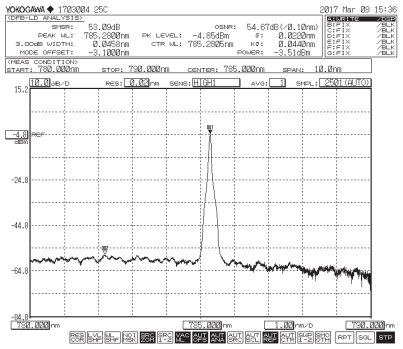
Applications

Raman spectroscopy Bio-instrumentation

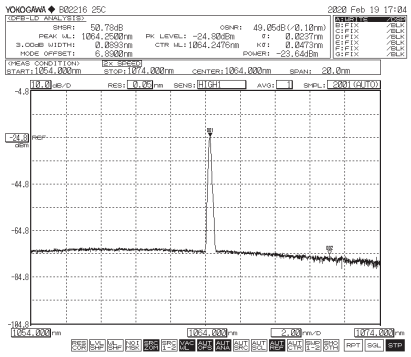
Technical Specifications

Optical Parameters				
Center Wavelength (nm)	784/785		785/1064	
Output Power (mW)	500	500	500	800
Wavelength Tolerance (nm)	±0.5 (each wavelength)			
Linewidth, each wavelength (nm)	<0.1			
Wavelength Stability	±7pm@4h Typ.			
Power Stability	±2% @4h Typ.			
SMSR	40dB			
System Parameters				
Adjustbility % 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	<5W Typ.			
Storage Humidity	0~80% RH			
Storage Temperature（℃）	0~55			
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℃, and the final data is subject to the final test report.



785nm laser spectrum
（SMSR＞40dB）



1064nm laser spectrum
（SMSR＞40dB）

RealLight
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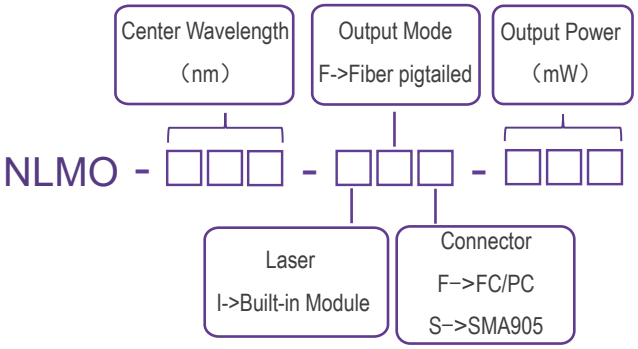
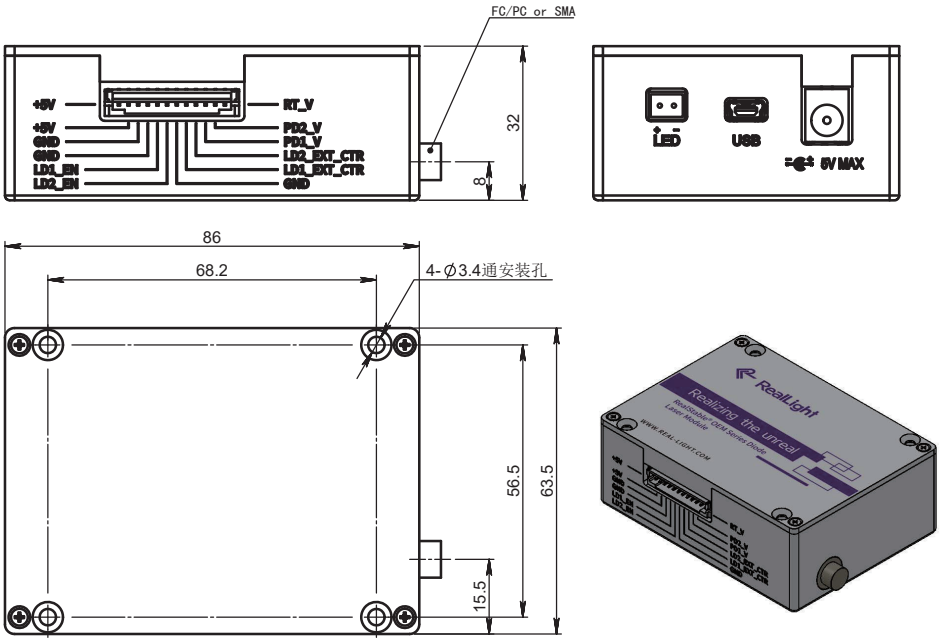
Ordering Information

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



Mechnical 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℃