



# NLMO Series Multi-mode Narrow Linewidth Laser



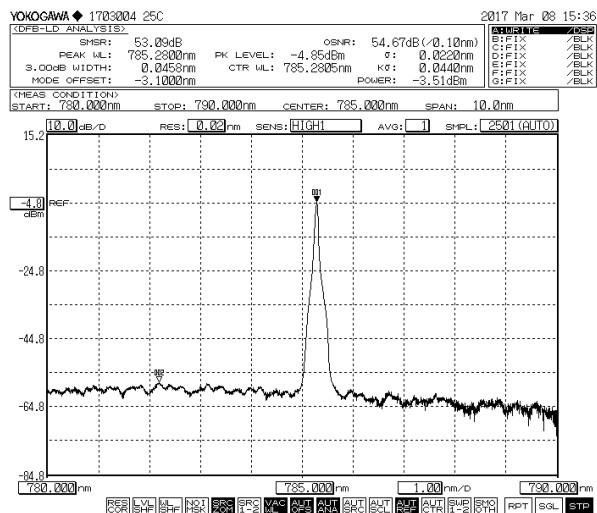
## Key Features

- ◆ Excellent wavelength stability  $\pm 7\text{pm}@4\text{h}$
- ◆ Power stability  $< \pm 2\%$
- ◆ Low power consumption, typical  $< 5\text{W}$
- ◆ Compact design, easily integrated

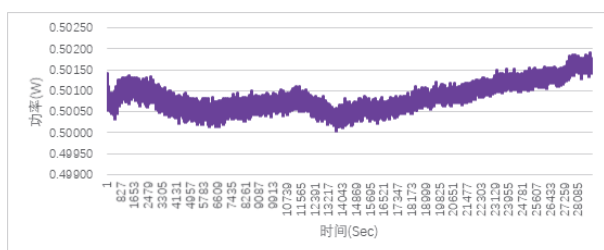
## Applications

- Raman spectroscopy
- Laser-induced fluorescence

## Technical Specifications



785nm laser spectrum (SMSR > 40dB)



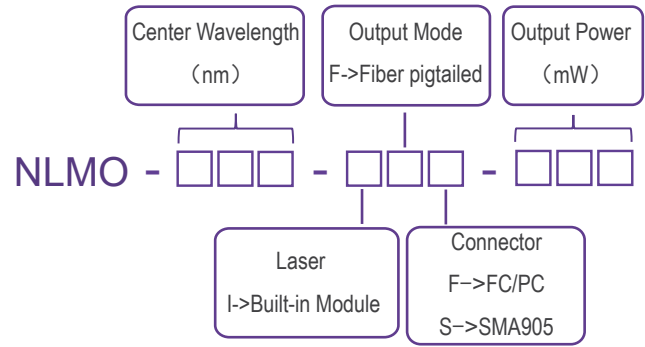
785nm power stability@4h

Optical Parameters						
Center Wavelength (nm)	638	785	808	830	976	1064
Output Power (mW)	600	500	600	600	800	800
Wavelength Tolerance (nm)	$\pm 0.5$					
Linewidth (nm)	< 0.1	< 0.1	< 0.3	< 0.1	< 0.3	< 0.1
Wavelength Stability	$\pm 7\text{pm}@4\text{h Typ.}$					
Power Stability	$\pm 2\% @4\text{h Typ.}$					
SMSR	30dB	40dB	30dB	40dB	30dB	40dB
System Parameters						
Adjustability % Full Power	0~100%					
Warm up Time (min)	15					
Control Interface	PH2.0-10P					
Connector	FC/PC, SMA905					
Output Fiber	105 $\mu\text{m}$ , 0.22 NA					
Supply Voltage	5VDC@ 2 A					
Power Consumption	<5W 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)	76.2x63.5x22					

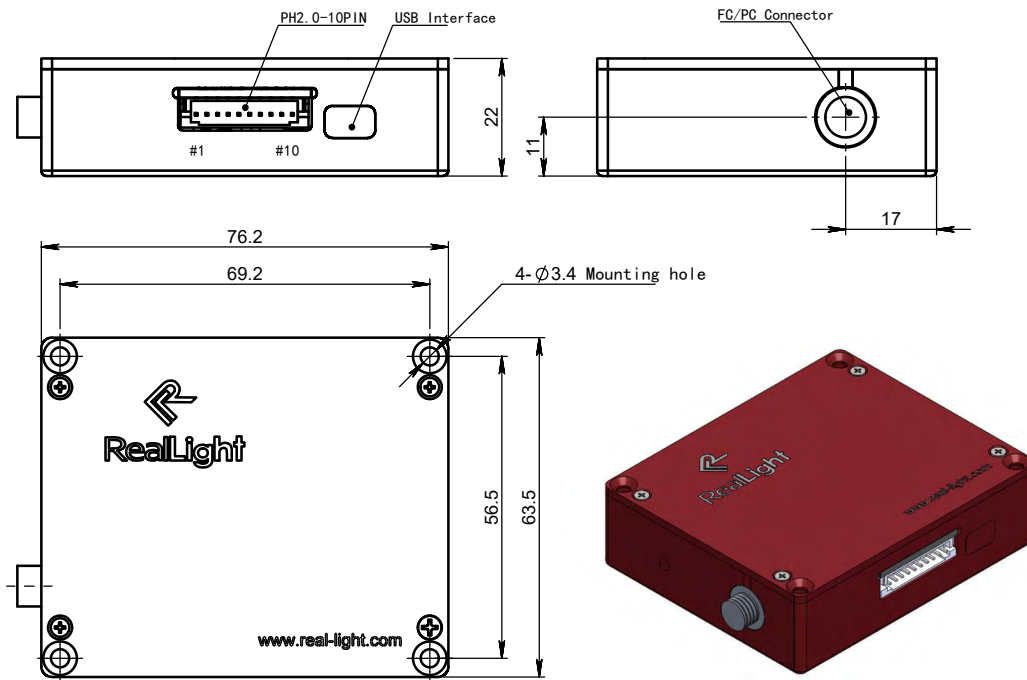
## Ordering Information

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

## Part Numbering Schema



## Mechanical Drawings (mm)



Pin Descriptions		
PIN	Function	Description
1	NC	NC
2	VSET_ENABLE	Set to low-level to control power through PIN8, high-level or suspend to disable LD
3	GND	Input Power Ground
4	RTV	Rt signal level, 1.25V for 25°C
5	GND	Input Power Ground
6	+5V	5VDC/2A
7	LASER ENABLE	Set to high-level to enable the laser, low-level or suspend to disable LD
8	Power Control	Apply 0-1.2V to control output power (0-100% full power adjustability)
9	GND	Signal Ground
10	PDV	PD feedback signal, 0.5V for 500mW

