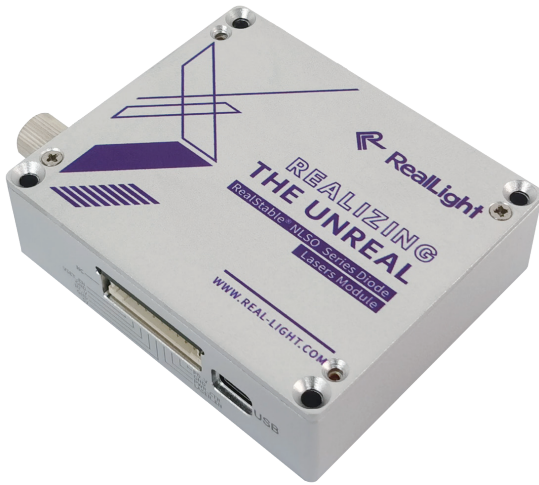


NLSO Series Single Mode Narrow Linewidth Laser



Key Features

- ◆ Power stability < $\pm 2\%$
- ◆ Low power consumption, typical < 5W
- ◆ Compact design, easily integrated

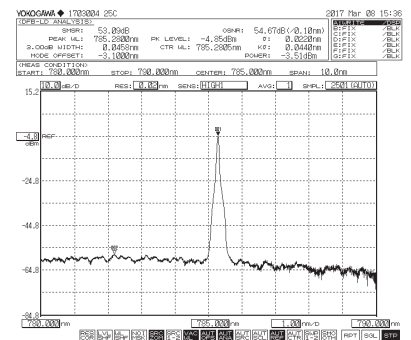
Applications

Raman spectroscopy
Laser-induced fluorescence
Laser-induced fluorescence (LIF)
Particle size analysis
Flow cytometer
Confocal microscopy
Laser holography
Laser indicator

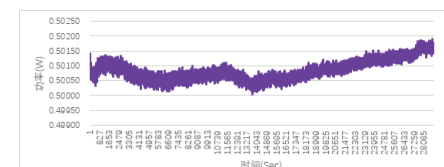
Technical Specifications

Optical Parameters							
Center Wavelength (nm)	405	450	520	638	650	785	1064
Output Power (mW)	100	100	100	100	100	100	300
Wavelength Tolerance (nm)	±5	±10				±0.5	
Linewidth (nm)	<2	<2	<3	<3	<3	<0.1	
Power Stability	±2% @4h typ.						
Output Fiber (μm/NA)	105/0.22					-	
Connector	FC/PC , SMA905					-	
Wavelength Stability	-					±7pm@4h typ.	
SMSR (dB)	-					35-45	
System Parameters							
Adjustbility % Full Power	0~100%						
Warm up Time (min)	15						
Control Interface	PH2.0-10P , USB						
Supply Voltage	5VDC/2A						
Power Consumption	<5W typ.						
Storage Humidity	0~70% RH						
Storage Temperature (°C)	-10~60						
Operating Temperature (°C)	10~35 (heat sink is required)						
Weight (g)	<150						
Dimensions (mm)	76.2×63.5×22						

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.



785nm laser spectrum (SMSR>40dB)

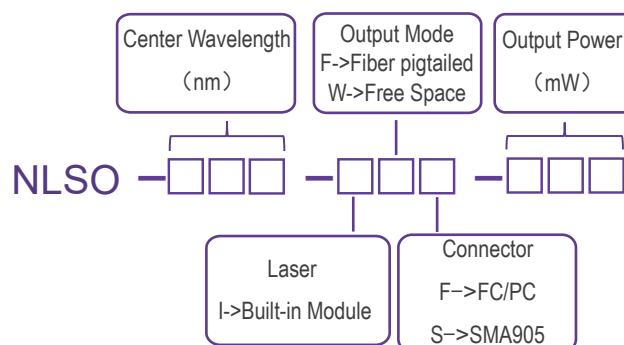


785nm power stability@4h

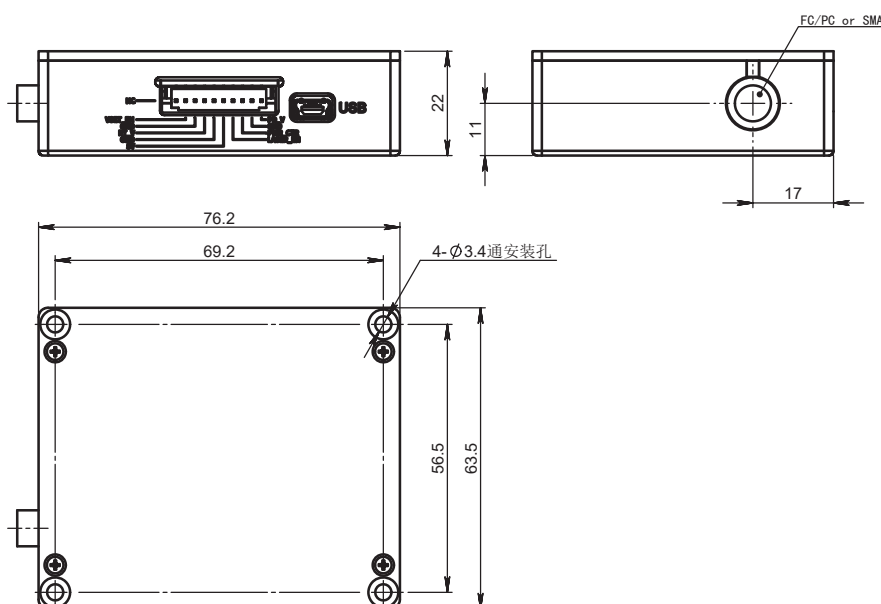
Ordering Information

Wavelength (nm)	Output Power (mW)	Part Number	Connector
405	100	NLSO-405-IF(F)-100	FC/PC
	100	NLSO-405-IF(S)-100	SMA905
450	100	NLSO-450-IF(F)-100	FC/PC
	100	NLSO-450-IF(S)-100	SMA905
520	100	NLSO-520-IF(F)-100	FC/PC
	100	NLSO-520-IF(S)-100	SMA905
638	100	NLSO-638-IF(F)-100	FC/PC
	100	NLSO-638-IF(S)-100	SMA905
650	100	NLSO-650-IF(F)-100	FC/PC
	100	NLSO-650-IF(S)-100	SMA905
785	100	NLSO-785-IW-100	-
1064	300	NLSO-1064-IW-300	-

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	Signal Ground
4	RTV	Rt signal level, 1.5V 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 100mW/350mW

Note: This dimensional drawing applies to products with wavelengths of 785/1064 nm. For products with other wavelengths, please contact the sales team for validated dimensional specifications.

