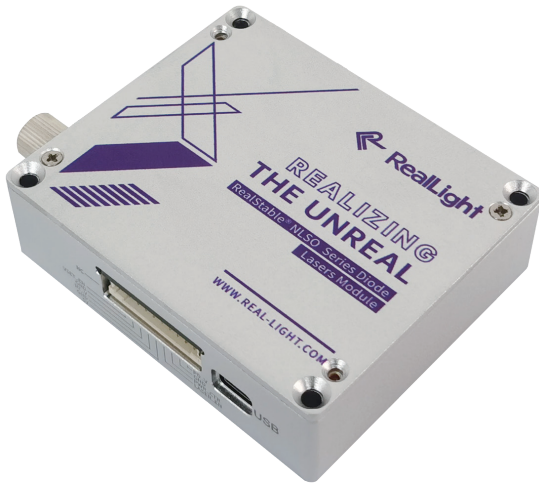


NLSO Series Single Mode Narrow Linewidth Laser



Key Features

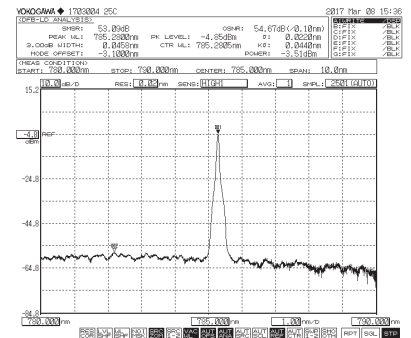
- ◆ Power stability < $\pm 2\%$
- ◆ Low power consumption, typical < 5W
- ◆ Compact design, easily integrated

Applications

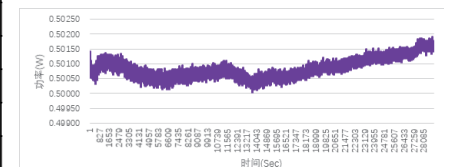
Raman spectroscopy
Laser-induced fluorescence
Laser-induced fluorescence (LIF)
Particle size analysis
Flow cytometer
Confocal microscopy
Laser holography
Laser indicator

Technical Specifications

Optical Parameters								
Center Wavelength (nm)	405	450	520	638	650	532*	785	1064
Output Power (mW)	100	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 (typ., @4h)	±2%(P-P)					<3%(RMS)		
Output Fiber (μm/NA)	105/0.22					-		
Connector	FC/PC , SMA905					-		
Wavelength Stability (typ., @4h)	-					±5 pm	±7 pm	
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							



785nm laser spectrum (SMSR>40dB)



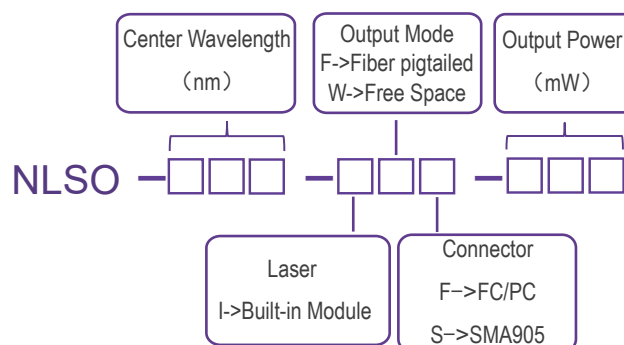
785nm power stability@4h

1. *532nm is diode pumped solid-state laser.
2. Higher power options available upon request.
3. 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.

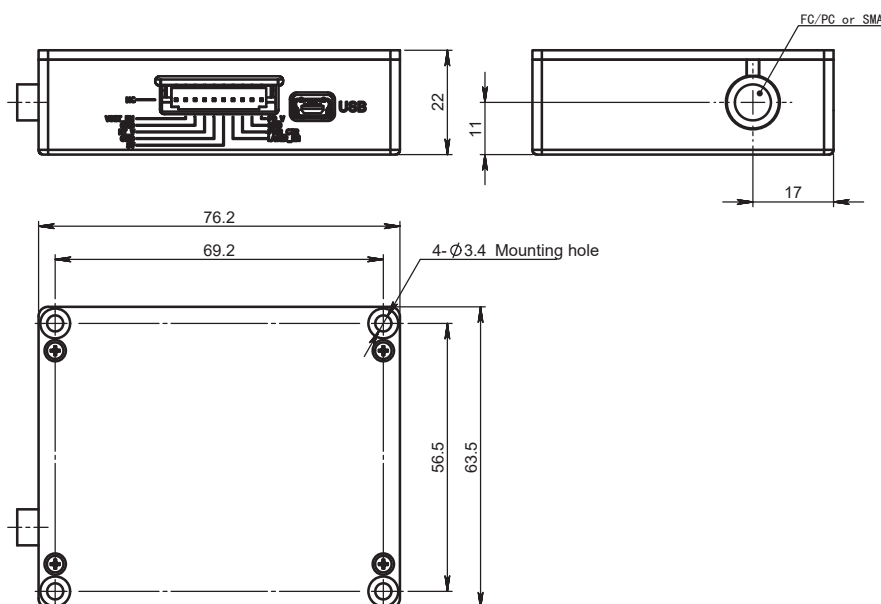
Ordering Information

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
532	100	NLSO-532-IW-100	-
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 532/785/1064 nm. For products with other wavelengths, please contact the sales team for validated dimensional specifications.

