



# Narrow Linewidth Laser Module



## Key Features

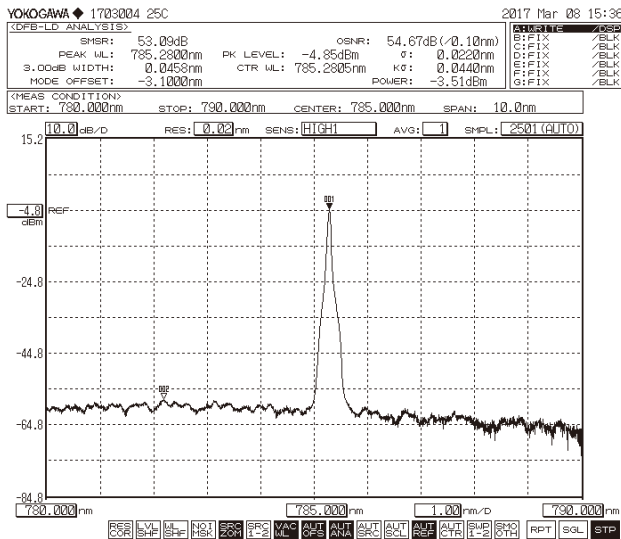
- ◆ The wavelength stability  $< 0.01 \text{ nm} / ^\circ\text{C}$
- ◆ High power fiber coupled output
- ◆ USB online setting, lock the output power
- ◆ Reserve IDC interface for convenient control
- ◆ USB3.0 power and control is supported

## Standard Wavelengths

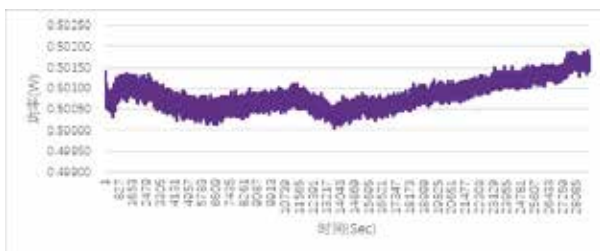
- 785nm
- 830nm
- 1064nm

## Application

- Confocal Microscope
- Fluorescence spectrum
- Laser Particle Analyzer
- Raman spectroscopy
- Up-conversion materials



785nm Laser Spectrum



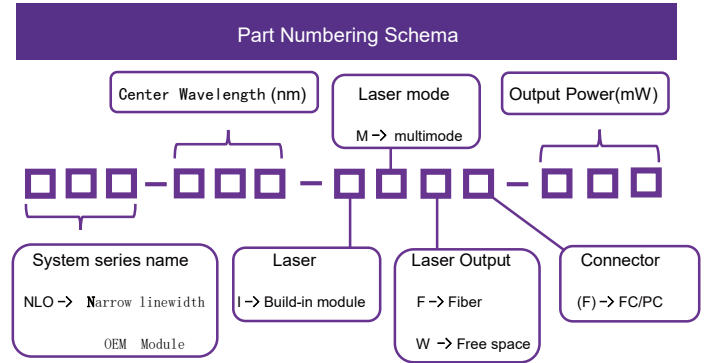
785nm Power Stability@8H

Optical Parameter			
Center Wavelength(nm)	785	830	1064
Output Power(mW)	500	500	500
Wavelength Tolerance(nm)	±0.5		
Linewidth(nm)	<0.1		
Wavelength Stability	±0.007 nm @8H		
Power Stability	±1.0% @8H		
SMSR	40dB		
System Parameter			
Adjustibility % full Power	0~100%		
Warm up Time	15min		
Control Interface	PH2.0-10P		
Connector	free space,FC/PC		
Output Fiber	105 μm, 0.22 NA		
Supply Voltage	4.9V ~ 5.1V @ 2 A		
Power Consumption	<5W Typ.		
Storage Temperature	0~80% RH		
Storage Humidity	0~55 °C		
Operating Temperature	10~35 °C (heat sink is required)		
Weight	<150 g		
Dimensions	76×63.5×25 mm		

## Ordering Information

NLO Serial Model List			
Center Wavelength(nm)	Output Power(mW)	Part Number	Connector
785	500	NLO-785-IMW-500	free space
	500	NLO-785-IMF (F)-500	FC/PC
830	500	NLO-830-IMW-500	free space
	500	NLO-830-IMF (F)-500	FC/PC
1064	500	NLO-1064-IMW-500	free space
	500	NLO-1064-IMF (F)-500	FC/PC

## Part Numbering Schema



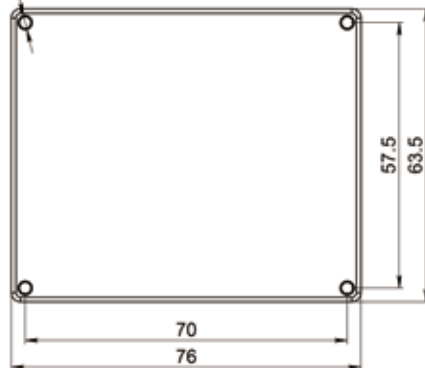
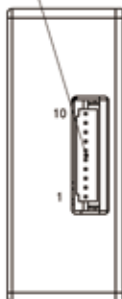
## Mechanical Specification

Pin Descriptions		
PIN	Function	Description
1	NC	-
2	GND	Power Supply Ground
3	RT_READ	Rt signal level,output voltage 1.25V, the laser temperature is controlled at 25°C
4	GND	Input Power Ground
5	GND	Input Power Ground
6	+5V	The input voltage is 4.9-5.1V,the maximum current is 2A
7	LASER ENABLE	Set high-level to enable the laser, suspend or set low-level to shut down the laser.
8	Power Control	Voltage input range 0 to 2.5V when control the output power from minimum to maximum
9	+5V	The input voltage is 4.9-5.1V,the maximum current is 2A
10	PD Monitor	PD output



PH2.0-10P interface

4-M3 Mounting Hole



Fiber-coupled Output

Fiber-coupled Output



Unit: mm