



Narrow Linewidth Laser Module



Key Features

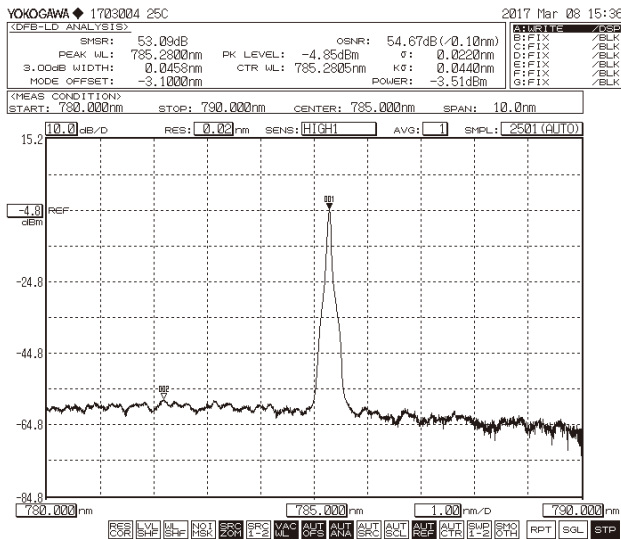
- ◆ The wavelength stability < 0.01 nm / °C
- ◆ High power fiber coupled output
- ◆ USB online setting, lock the output power
- ◆ Reserve IDC interface for convenient control
- ◆ USB3.0 power and control is supported

Standard Wavelengths

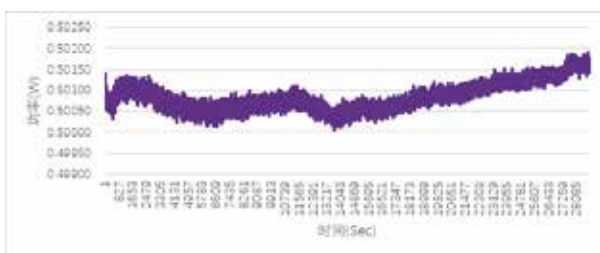
- 785nm
- 830nm
- 1064nm

Application

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



785nm Laser Spectrum



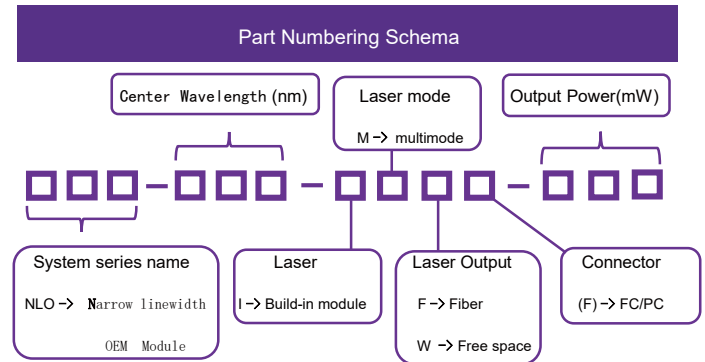
785nm Power Stability@8H

| 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



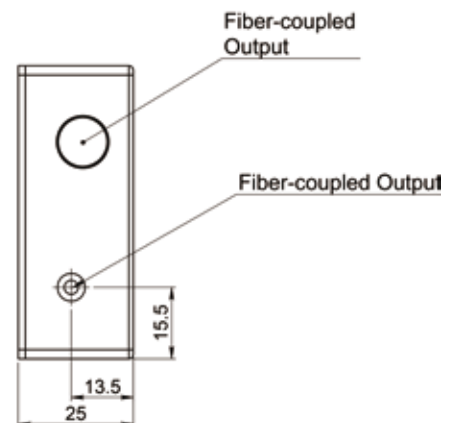
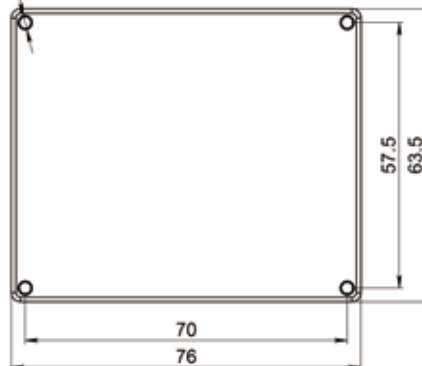
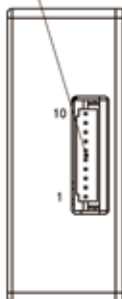
Mechanical Specification

| 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



Unit: mm