

## 405~940nm CW Single Mode Fiber Laser



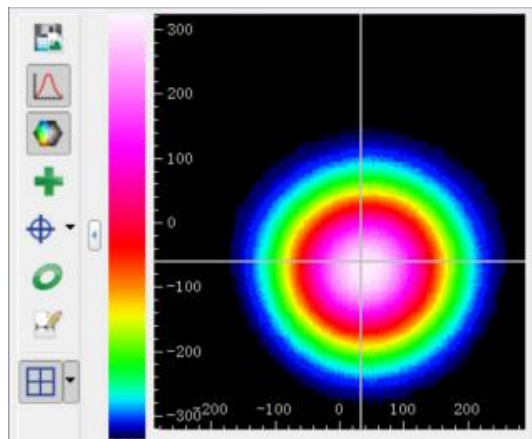
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## 405nm~940nm CW Single Mode Fiber Laser

Our laser is engineered with a high-quality semiconductor chip and is backed by advanced driving and temperature control circuits to ensure consistently safe operation. It delivers a steady output power and a well-defined spectral range, complemented by superior beam quality in the TEM00 mode for precise applications.



### Features

- Single mode fiber output
- High stability
- Excellent beam quality

### Application

- Beam spot indicator
- Optical imaging
- Device testing

### Specifications

| Optical Parameters    | Unit | Typical Value | Remarks                       |
|-----------------------|------|---------------|-------------------------------|
| Wavelength            | nm   | 405~940       | See the table below           |
| Wavelength Accuracy   | nm   | ±5 nm         |                               |
| Laser Mode            | -    | CW            | Continuous light              |
| Output Power          | mW   | 5/30/50/80    | Determine based on wavelength |
| Instability(15min.in) | dB   | ≤ ±0.02       | Equivalent to ≤±0.5%          |
| Instability(8hr)      | dB   | ≤ ±0.05       | Equivalent to ≤±1.2%          |
| Optical Fiber         | -    | SM Fiber      |                               |
| Fiber connector       | -    | FC/APC        |                               |

## Specifications

| General Parameters    | Desktop                              | Module                     |
|-----------------------|--------------------------------------|----------------------------|
| Control Function      | Keystroke/RS232 serial Communication | RS232 serial Communication |
| Remote control Port   | DB9 Female                           | DB9 Female                 |
| Power Supply          | AC100~240V, <30W                     | DC5V3A or DC12V3A          |
| Dimensions            | 260(W)×280(D)×120(H)mm               | 125(W)×150(D)×20(H)mm      |
| Operation Temperature | -5~+35°C                             |                            |
| Operation Humidity    | 0~70%                                |                            |

| Ordering Information/ Product Code |                |                  |                        |             |
|------------------------------------|----------------|------------------|------------------------|-------------|
| Series                             | Wavelength(nm) | Output Power(mW) | Fiber                  | Packaging   |
| STFL                               | 405~940        | 5/10/20/100      | SM = Single Mode Fiber | M - Module  |
|                                    |                |                  | PM = PM Fiber          | B - Desktop |

| Wavelength(nm)           | 405 | 450                          | 488 | 520 | 638                          | 660 | 670 | 685                          | 785 | 808 | 830 | 850 | 905 | 940 |
|--------------------------|-----|------------------------------|-----|-----|------------------------------|-----|-----|------------------------------|-----|-----|-----|-----|-----|-----|
| Power(mW)                | 80  | 30                           | 30  | 50  | 90                           | 50  | 5   | 25                           | 40  | 50  | 80  | 80  | 80  | 150 |
| Mold field diameter (μm) | 3.5 | 3.5                          | 3.5 | 3.5 | 4.0                          | 4.0 | 4.0 | 4.0                          | 5.0 | 5.0 | 5.5 | 5.5 | 6.0 | 6.0 |
| NA                       | 0.1 | 0.1                          | 0.1 | 0.1 | 0.1                          | 0.1 | 0.1 | 0.1                          | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Fiber type               | *   | 405-HP<br>(Fiber core=2.1μm) |     |     | 630-HP<br>(Fiber core=3.5μm) |     |     | 780-HP<br>(Fiber core=4.4μm) |     |     |     |     |     |     |

\* Default for 450nm wavelength single-mode fiber model: Nufern S405XP (core diameter = 3μm); polarization-maintaining fiber model: Nufern PMS405XP