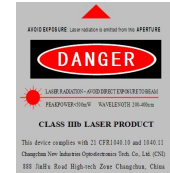


### MPL-U-xxx-SU series (1300-1500nm)

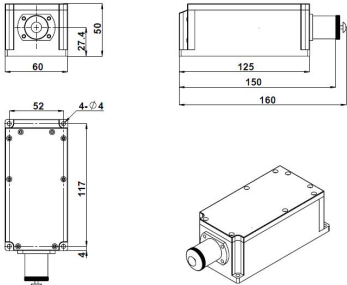
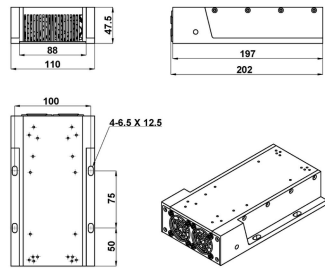
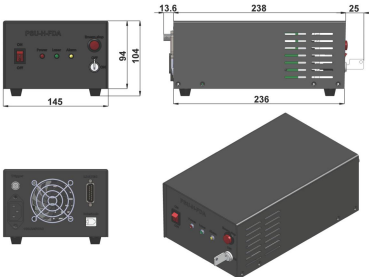
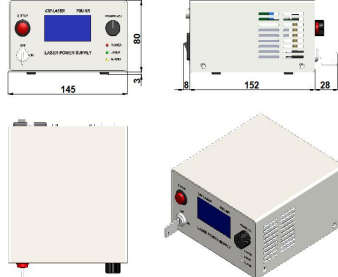
#### LD PUMPED ALL-SOLID-STATE PASSIVELY LASER

All solid state passively laser has the features of high peak power, high repetition rate, and short pulse duration, which is widely used in marking, carving, measure, research and so on.



#### SPECIFICATIONS

|                                       |                  |                   |         |          |
|---------------------------------------|------------------|-------------------|---------|----------|
| Wavelength (nm)                       |                  | 1313±1            | 1319±1  | 1444±1   |
| Operating mode                        |                  | Passively         |         |          |
| Average power (mW) <sup>1</sup>       |                  | 1-100             | 1-150   | 1-30     |
| Single pulse energy (μJ) <sup>2</sup> |                  | 1-20              | 1-15    | 1-30     |
| Pulse duration (ns)                   |                  | ~15               |         | ~2.5ns   |
| Peak power (kW)                       |                  | 0.1-1.3           | 0.1-1.0 | 0.4-12   |
| Rep. rate                             | Int <sup>3</sup> | 1Hz-4kHz          |         | 1Hz-1kHz |
|                                       | Ext <sup>4</sup> | 1Hz-4kHz          |         | 1Hz-1kHz |
|                                       | QCW <sup>5</sup> | 5-20kHz           |         | /        |
| Power stability (rms, 4 hours ±3°C)   |                  | <5%, <3%, <2%     |         |          |
| Transverse mode                       |                  | TEM <sub>00</sub> |         |          |
| M <sup>2</sup>                        |                  | <2.0              |         |          |
| Beam diameter at the aperture (mm)    |                  | ~1.2              |         |          |
| Beam divergence, full angle (mrad)    |                  | <2.0              |         |          |
| Warm-up time (minutes)                |                  | <5                |         |          |
| Beam height from base plate (mm)      |                  | 27.4              |         |          |
| Operating temperature (°C)            |                  | 10-35             |         |          |
| Power supply (100-240VAC)             |                  | PSU-H-FDA/ PSU-SR |         |          |
| Expected lifetime (hours)             |                  | >10000            |         |          |

| LASER HEAD <sup>6</sup>                                                                                                                   | HEATSINK (optional TC-02-FS)                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>160(L)×60(W)×50(H) mm<sup>3</sup>, 0.9 kg</p>        |  <p>202(L)×110(W)×47.5(H) mm<sup>3</sup>, 1.25 kg</p> |
| POWER SUPPLY (PSU-H-FDA) <sup>7</sup>                                                                                                     | POWER SUPPLY (PSU-SR) <sup>8</sup>                                                                                                       |
|  <p>276.6(L)×145(W)×103.6(H) mm<sup>3</sup>, 2.3 kg</p> |  <p>188(L)×145(W)×83(H) mm<sup>3</sup>, 1.2 kg</p>   |

- 1 Average power (mW)= Single pulse energy (μJ)\* Rep. rate(kHz)
- 2 Any energy level can be selected within this range.
- 3 The frequency is selectable from one or five discrete values within the range.
- 4 External triggered.
- 5 The rep.rate is a free running value within this range.
- 6 The laser head needs to be used on a heat sink with good heat dissipation.
- 7 Fixed output energy.
- 8 In QCW mode, the output power is adjustable from 10% to 100%.