



MBL-F series



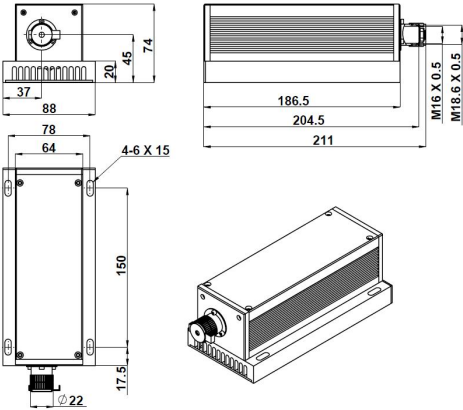
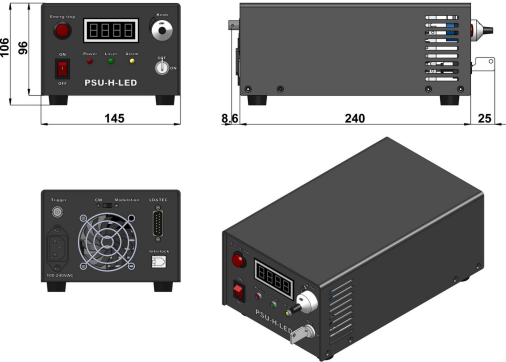
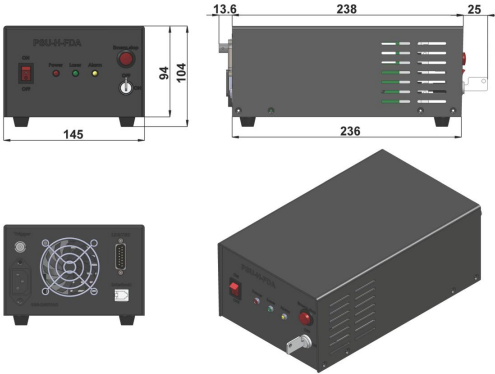
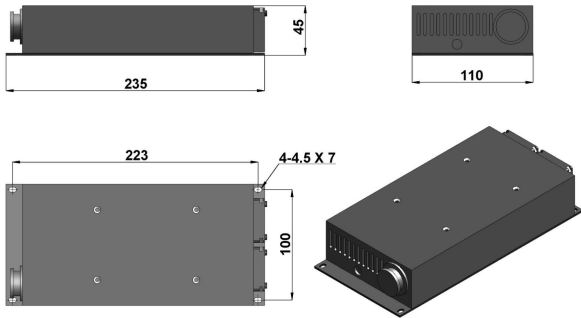
LD PUMPED ALL-SOLID-STATE LASER

All solid state laser is made features of ultra compact, long lifetime, low cost and easy operating, which is used in fluorescence sensors, Raman spectrum, laser printing, holography, laser display, submarine communication, biomedicine, laser lighting show, etc.



SPECIFICATIONS

|                                                       |           |                                                                               |                                                                 |                   |                        |           |                                        |
|-------------------------------------------------------|-----------|-------------------------------------------------------------------------------|-----------------------------------------------------------------|-------------------|------------------------|-----------|----------------------------------------|
| Part number                                           |           | MBL-F-457                                                                     |                                                                 | MBL-F-473         |                        | MBL-F-480 |                                        |
| Wavelength (nm)                                       |           | 457±1                                                                         |                                                                 | 473±1             |                        | 480±1     |                                        |
| Operating mode                                        |           | CW                                                                            |                                                                 |                   |                        |           |                                        |
| Output power (mW)                                     |           | 30-400                                                                        | 400-1000                                                        | 1-300             | 300-500                | 1-50      |                                        |
| Power stability (rms, over 4 hours)                   |           | <3%, <2%, <1%                                                                 | <5%, <3%                                                        | <3%, <2%, <1%     |                        |           | <5%, <3%                               |
| Transverse mode                                       |           | Near TEM <sub>00</sub>                                                        | Near TEM <sub>01</sub> ,<br>(Near TEM <sub>00</sub> on request) | TEM <sub>00</sub> | Near TEM <sub>00</sub> |           |                                        |
| M <sup>2</sup> factor                                 |           | <1.5                                                                          | <2.0                                                            | <1.5              |                        |           | <2.0                                   |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm) |           | ~2.0                                                                          |                                                                 |                   |                        |           | ~3.0                                   |
| Beam divergence, full angle (mrad)                    |           | <1.5                                                                          |                                                                 |                   |                        |           |                                        |
| Polarization Ratio                                    |           | >100:1, Vertical (Horizontal Optional)                                        |                                                                 |                   |                        |           | >100:1, Horizontal (Vertical Optional) |
| Warm-up time (minutes)                                |           | <5                                                                            |                                                                 |                   |                        |           |                                        |
| Pointing stability after warm-up (mrad)               |           | <0.05                                                                         |                                                                 |                   |                        |           |                                        |
| Beam height from base plate (mm)                      |           | 45                                                                            |                                                                 |                   |                        |           |                                        |
| Operating Temperature (°C)                            |           | 10-35                                                                         |                                                                 |                   |                        |           |                                        |
| Modulation optional                                   |           | TTL on/off, 1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz, and Analog modulation optional |                                                                 |                   |                        |           |                                        |
| Power supply                                          | 90-264VAC | PSU-H-LED/ PSU-H-FDA/ PSU-SR                                                  |                                                                 |                   |                        | PSU-H-FDA |                                        |
|                                                       | DC 12V    | PSU-H-OEM                                                                     |                                                                 |                   |                        |           |                                        |
| Expected lifetime (hours)                             |           | 10000                                                                         |                                                                 |                   |                        |           |                                        |
| Warranty                                              |           | 1 year                                                                        |                                                                 |                   |                        |           |                                        |

| LASER HEAD                                                                                                                                  | POWER SUPPLY (PSU-H-LED)                                                                                                                       | POWER SUPPLY (PSU-H-FDA)                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>211 (L) × 88 (W) × 74 (H) mm<sup>3</sup>, 1.6 kg</p>   |  <p>273.6 (L) × 145 (W) × 106 (H) mm<sup>3</sup>, 2.3 kg</p> |  <p>276.6 (L) × 145 (W) × 103.6 (H) mm<sup>3</sup>, 2.3 kg</p> |
| POWER SUPPLY (PSU-H-OEM)                                                                                                                    | POWER SUPPLY (PSU-SR)                                                                                                                          |                                                                                                                                                   |
|  <p>235 (L) × 110 (W) × 45 (H) mm<sup>3</sup>, 1.1 kg</p> |  <p>188 (L) × 145 (W) × 83 (H) mm<sup>3</sup>, 1.2 kg</p>   |                                                                                                                                                   |