



## MDL-III-442-SM/1-15mW



### BLUE DIODE LASER AT 442nm

It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are used in medical imaging, flow cytometry, DNA sequencing, etc.



#### SPECIFICATIONS

|                                      |                                                                                  |
|--------------------------------------|----------------------------------------------------------------------------------|
| Central wavelength (nm)              | 442±10                                                                           |
| Operating mode                       | CW                                                                               |
| Output power (mW) <sup>1</sup>       | 1-15                                                                             |
| Power stability (rms, 4 hours ± 3°C) | <2%, <1%, <0.5%                                                                  |
| Fiber type                           | SM fiber, PM fiber optional                                                      |
| Fiber Core diameter                  | 4-9μm, 0.12NA                                                                    |
| Fiber connector                      | FC/PC, FC/APC optional                                                           |
| Fiber length <sup>2</sup>            | 1m                                                                               |
| Fiber jacket                         | Metal, PVC optional                                                              |
| Transverse mode                      | TEM <sub>00</sub>                                                                |
| Ellipticity                          | >0.95                                                                            |
| M <sup>2</sup> after fiber           | ~1.1                                                                             |
| Warm-up time (minutes)               | <5                                                                               |
| Cooled method                        | Conduction                                                                       |
| Operating temperature (°C)           | 10-35                                                                            |
| Power supply (100-240VAC)            | PSU-III-FDA/PSU-III-LED/PSU-A-D/PSU-III-OEM                                      |
| Modulation option                    | DC-1kHz, 1kHz-10kHz, 10kHz-30kHz, 30kHz-100kHz optional; TTL and Analog optional |
| Expected lifetime (hours)            | >10000                                                                           |

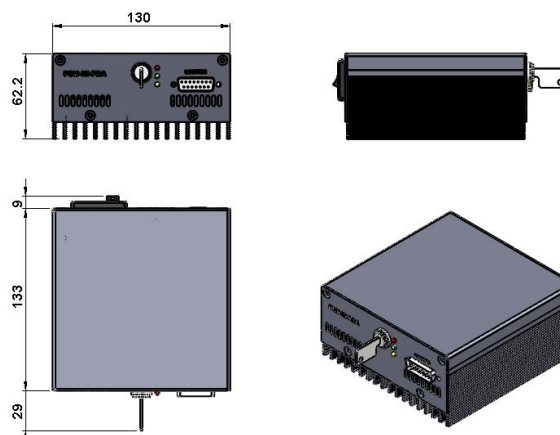


#### LASER HEAD



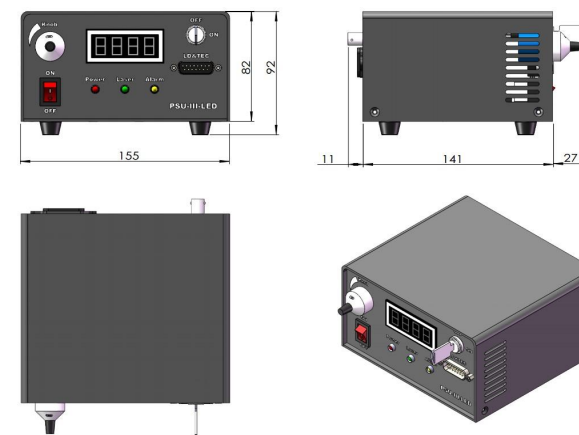
126.5 (L) × 73 (W) × 46.2 (H) mm<sup>3</sup>, 0.7kg

#### POWER SUPPLY (PSU-III-FDA)<sup>3</sup>



171 (L) × 130 (W) × 62.2 (H) mm<sup>3</sup>, 1.2kg

#### POWER SUPPLY (PSU-III-LED)<sup>4</sup>



179 (L) × 155 (W) × 92 (H) mm<sup>3</sup>, 1.5kg

| POWER SUPPLY (PSU-A-D) <sup>5</sup>                                                                                                                                 | DRIVER (PSU-III-OEM) <sup>3</sup>                                                                                                                                                                                                      | POWER SUPPLY (100-240VAC) optional                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>144<br/>70<br/>162</p> <p>162 (L) × 144 (W) × 70 (H) mm<sup>3</sup>, 1.0kg</p> |  <p>100<br/>55.2<br/>62<br/>31<br/>60<br/>7<br/>33<br/>40*40*10<br/>2 x M3<br/>5<br/>42</p> <p>100 (L) × 62 (W) × 55.2 (H) mm<sup>3</sup>, 0.5kg</p> |  <p>125.7<br/>50.2<br/>31.8</p> <p>125.7 (L) × 50.2 (W) × 31.8 (H) mm<sup>3</sup>, 0.3kg</p> |

1 Any power level can be selected in this range.

2 Other lengths are available on request.

3 Fixed output power; Modulation up to 30kHz.

4 Output power adjustable 10-100%; RS232 control optional; Modulation up to 30kHz.

5 Output power adjustable 10-100%; RS232 control optional; Modulation up to 100kHz.