# MDL-III-1682DFB-SM/1-5mW



## INFRARED DIODE LASER AT 1682nm

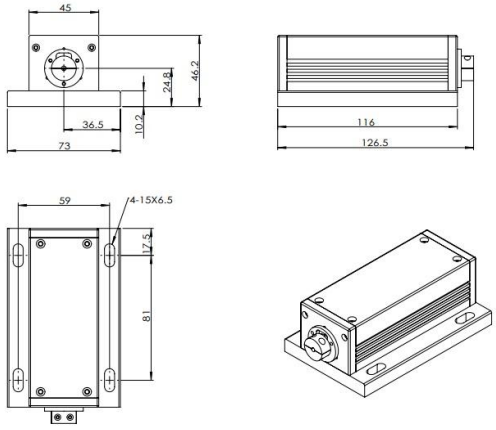
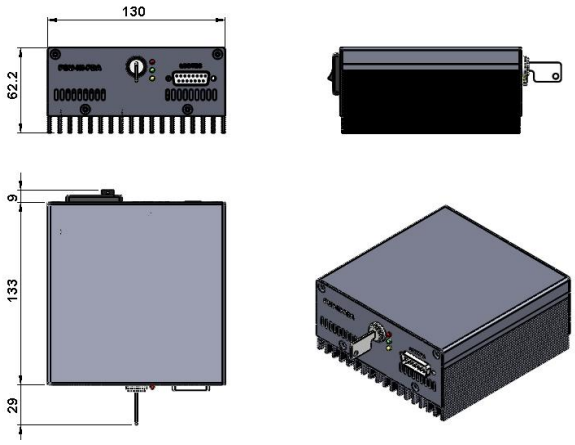
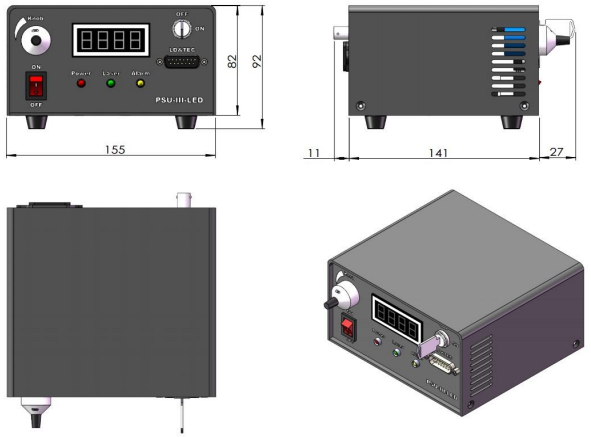
It features ultra compact design, long lifetime, cost-effectiveness and easy operation. They are used in measurement, communication, spectrum analysis, etc.

**SPECIFICATIONS**

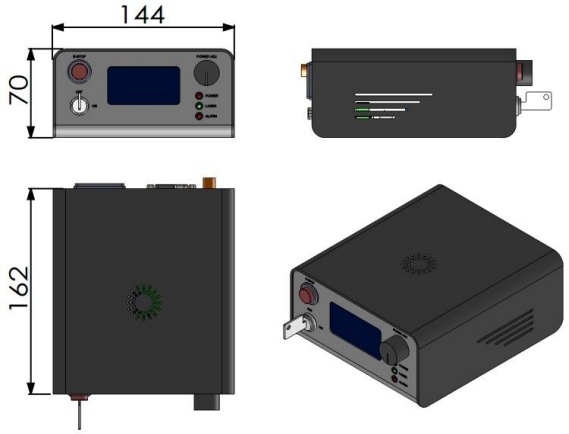
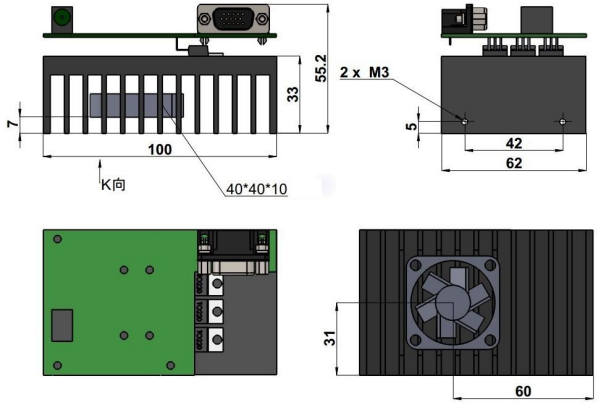
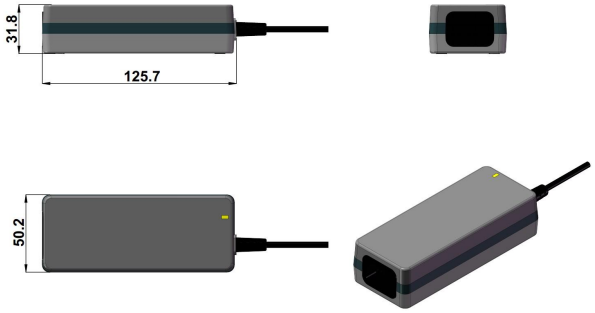
| | |
|---|---|
| Central wavelength (nm) | 1682±2 |
| Operating mode | CW |
| Output power after fiber (mW)[1] | 1-5 |
| Power stability (rms, 4 hours ± 3°C) | <2%, <1%, <0.5% |
| Fiber type | SM fiber, PM fiber optional |
| Fiber Core diameter | 4-9μm, 0.12NA |
| Fiber connector | FC/PC, FC/APC optional |
| Fiber length[2] | 1m |
| Fiber jacket | Metal, PVC optional |
| Transverse mode | $TEM_{00}$ |
| Ellipticity | >0.95 |
| $M^2$ 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 | POWER SUPPLY (PSU-III-FDA)[3] | POWER SUPPLY (PSU-III-LED)[4] |
|---|---|---|
|  |  |  |
| 126.5 (L) ×73 (W) ×46.2 (H) mm³, 0.7kg | 171 (L) ×130 (W) ×62.2 (H) mm³, 1.2kg | 179 (L) ×155 (W) ×92 (H) mm³, 1.5kg |

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| POWER SUPPLY (PSU-A-D)[5] | DRIVER (PSU-III-OEM)[3] | POWER SUPPLY (100-240VAC) optional |
|---|---|---|
|  |  |  |
| **162 (L) ×144 (W) ×70 (H) mm³, 1.0kg** | **100 (L) ×62 (W) ×55.2 (H) mm³, 0.5kg** | **125.7 (L) ×50.2 (W) ×31.8 (H) mm³, 0.3kg** |

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.