

## MDL-XS-937/1-50mW

## SPECIFICATIONS

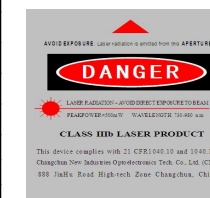


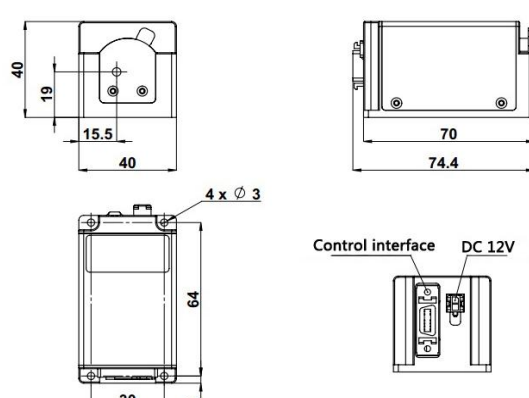
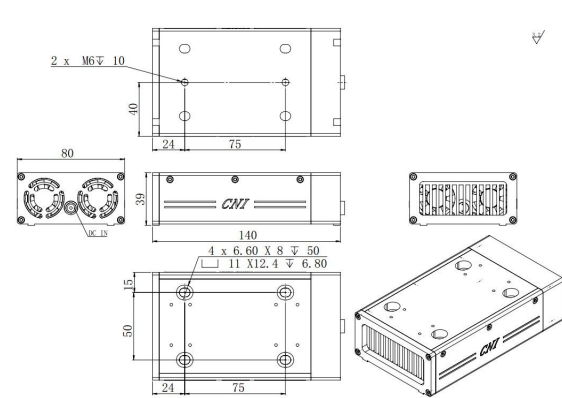
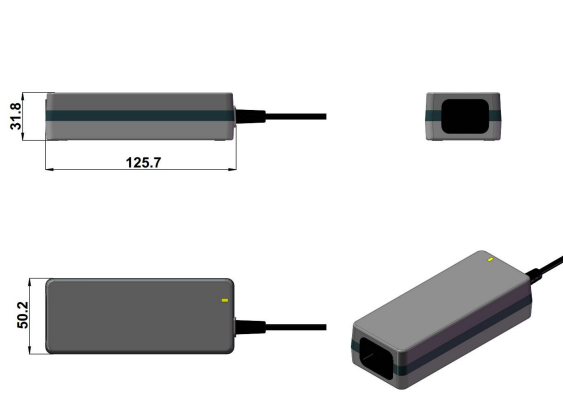
### DIODE XS SERIES LASER AT 937nm

It features integrated electronics, plug and play, miniaturization, international standard interface. They are the ideal solution for a wide range of applications including life sciences, environmental monitoring, inspection and machine vision.



|                                                       |                                                                            |
|-------------------------------------------------------|----------------------------------------------------------------------------|
| Central wavelength (nm)                               | 937±5                                                                      |
| Operating mode                                        | CW                                                                         |
| Output power (mW) <sup>1</sup>                        | 1-50                                                                       |
| Power stability (rms, 4 hours ± 3°C)                  | <2%, <1%, <0.5%                                                            |
| Transverse mode                                       | Near TEM <sub>00</sub>                                                     |
| Noise of amplitude (rms, 20Hz-20MHz)                  | <1%, <0.5%                                                                 |
| M <sup>2</sup>                                        | ~1.5                                                                       |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm) | ~1.2                                                                       |
| Beam divergence, full angle (mrad)                    | <1.0                                                                       |
| Polarization ratio                                    | >10:1, (>50:1 optional)<br>Horizontal±5 degree (Vertical optional)         |
| Warm-up time (minutes)                                | <5                                                                         |
| Beam height from base plate (mm)                      | 19                                                                         |
| Operating temperature (°C)                            | 10-35                                                                      |
| Operating voltage (VDC)                               | 12V/4A                                                                     |
| Modulation option                                     | DMOD (TTL) DC-1MHz<br>AMOD (Analog) DC-100kHz<br>DMOD+ AMOD (TTL + Analog) |
| Expected lifetime (hours)                             | >10000                                                                     |



| LASER HEAD (DRIVER Integrated) <sup>2</sup>                                                                                                                            | HEATSINK (TC-05) optional                                                                                                                                              | POWER SUPPLY (100-240VAC) optional                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p style="text-align: center;">74.4 (L) × 40 (W) × 40 (H) mm<sup>3</sup>, 0.2kg</p> |  <p style="text-align: center;">140 (L) × 80 (W) × 39 (H) mm<sup>3</sup>, 0.7kg</p> |  <p style="text-align: center;">125.7 (L) × 50.2 (W) × 31.8 (H) mm<sup>3</sup>, 0.3kg</p> |

<sup>1</sup> Any power level can be selected in this range.

<sup>2</sup> The laser head needs to be used on a heat sink with good heat dissipation. Fixed output power; RS232 control optional.