

# Compact infrared 808-980 nm single mode CrystaLaser®

High reliability High stability Single longitudinal mode Circular beam

## SPECIFICATIONS

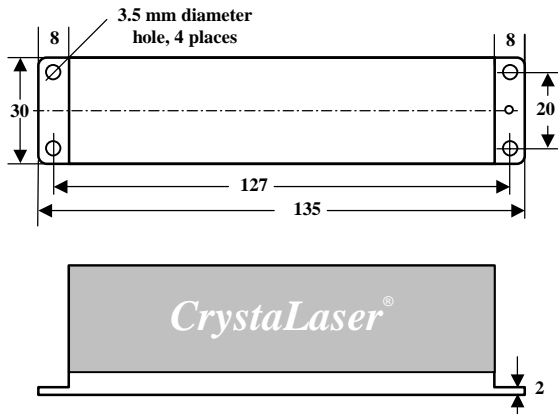
| Wavelength                            | Option ± 1 nm available | Low noise version, Model No.   |  |           |        | SLM version, Model No.                  |        |             |        |
|---------------------------------------|-------------------------|--|--|-----------|--------|---|--------|-------------|--------|
| 808 ± 5 nm                            |                         | DL808-100  | 100 mW   | DL808-120 | 120 mW | DL808-100-S                             | 100 mW | DL808-120-S | 120 mW |
| 830 ± 5 nm                            |                         | DL830-100  | 100 mW   |           |        | DL830-100-S                             | 100 mW | DL830-050-S | 50 mW  |
| 852 ± 5 nm                            |                         | DL852-100  | 100 mW   |           |        | DL852-100-S                             | 100 mW |             |        |
| 910 ± 5 nm                            |                         | DL910-100  | 100 mW   | DL910-150 | 150 mW | DL910-100-S                             | 100 mW | DL910-050-S | 50 mW  |
| 940 ± 5 nm                            |                         | DL940-100  | 100 mW   | DL940-150 | 150 mW | DL940-100-S                             | 100 mW | DL940-050-S | 50 mW  |
| 980 ± 5 nm                            |                         | DL980-500  | 500 mW   | DL980-200 | 200 mW | DL980-100-S                             | 100 mW | DL980-050-S | 50 mW  |
|                                       |                         | DL980-350  | 350 mW   | DL980-100 | 100 mW |   |        |             |        |
| Longitudinal mode                     |                         | Multiple   |  |           |        | Single                                  |        |             |        |
| Spectrum linewidth                    |                         | 1 nm, typical  |  |           |        | < 0.0001 nm                             |        |             |        |
| Coherence length                      |                         | < 0.3 mm   |  |           |        | > 10 meters                             |        |             |        |
| Output noise (rms, 10Hz-50MHz)        |                         | < 0.5 %  |  |           |        | < 0.5 %                                 |        |             |        |
| Output stability over 24 hours (rms)  |                         | < 1 %; Option: ultra-stable version < 0.25%  |  |           |        | 2 % Option: ultra-stable version < 0.5% |        |             |        |
| Modulation options                    |                         | TTL 200Hz, 50kHz, 20MHz, 100 MHz, 200MHz;<br>Analog control, Analog modulation   |  |           |        | TTL on/off option                       |        |             |        |
| Transverse mode                       |                         | Circular beam, single mode, TEM <sub>00</sub> , M <sup>2</sup> = 1.1 - 1.3   |  |           |        |   |        |             |        |
| Beam diameter (1/e <sup>2</sup> )     |                         | 1.1 mm   | Option: 0.7X - 3X laser beam expanders are available to change beam size and divergence.<br>e.g. 0.8 mm beam with 1.5 mrad divergence; or 2.5 mm beam with 0.5 mrad divergence |           |        |   |        |             |        |
| Beam divergence                       |                         | 1.2 mrad   |  |           |        |   |        |             |        |
| Beam pointing stability               |                         | < 0.005 mrad/°C  |  |           |        |   |        |             |        |
| Polarization ratio                    |                         | 100:1; Vertical linear polarization  |  |           |        |   |        |             |        |
| Operation temperature                 |                         | 5 °C to 40 °C, internal TEC temperature-stabilized   |  |           |        |   |        |             |        |
| Warm-up time                          |                         | < 30 seconds   |  |           |        |   |        |             |        |
| Operation voltage                     |                         | 90-250 VAC or 12VDC OEM version 11-16VDC   |  |           |        |   |        |             |        |
| Dimensions and weight of laser head   |                         | 3 x 3.6 x 13.5 cm <sup>3</sup> (1.2 x 1.4 x 5.3 in <sup>3</sup> ), 0.3 kg (0.6 lb)   |  |           |        |   |        |             |        |
| Dimensions and weight of power supply |                         | Standard AC: 5 x 14 x 15 cm <sup>3</sup> (2 x 5.5 x 6 in <sup>3</sup> ), 0.5 kg (1 lb);<br>12 VDC OEM version: Integrated inside the laser head. |  |           |        | CL-2005 AC: 5 x 16 x 15 cm <sup>3</sup> |        |             |        |

Up to 10W available for multi-mode laser for the laser wavelength of 808 nm-980 nm

**Applications:** Flow cytometry, Fluorescence, Confocal microscopy, Raman Spectroscopy

**Fiber coupling option:** Single mode and multi-mode fiber delivery.

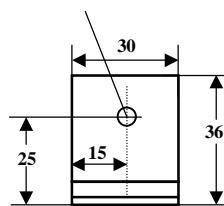
**CL-2005 power supply option:** Power adjustable and power digital display.



All dimensions in mm

### Front View

Laser beam is output from this aperture



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