ClaireLasers www.clairelasers.com

NanoLaser™ Series

The NanoLaser™ product series combines state-of-the-art semiconductor lasers with advanced electronic and optomechanical design. Designed for time-resolved measurement, including short-range lidar, time-gated measurement, fast stroboscopic imaging and time-resolved spectroscopy, the NanoLaser™ series offers value-added time-saving engineering to your integrated OEM application.

The standard product offers a variable clock rate, with a trigger output for synchronized detection; external trigger input for user-defined clock rate is available on special order. The standard product provides free space laser beam output with a nominal divergence between 6 and 10 degree FWHM, depending on wavelength and power. Collimated output to customer specification and fibre-coupled output into single-mode fibre are also available on special order. The NanoLaser™ series is a simple and versatile instrument with user-friendly interface for research and application development.

highlights

Compact and versatile pulsed laser sources

- Pulse duration range: 2 nsec to 100 nsec
- Internal clock with external trigger output
- Wavelength range: 375 nm to 980 nm
- Small footprint for easy integration
- Solid-state: long enhanced lifetime
- TEM_{00} beam in most models

industry

Applications

- Short-range LIDAR and ranging
- Pulsed laser probe for spectroscopy
- Probe laser for time-resolved instruments

specifications

NanoLaser™ Series

spec: BCL04_r001
date: 2005 09 01

Product P/N: NL-LLL-PPP-DDD

P/N Definition
LLL Wavelength in nanometer unit
PPP Peak pulse power in mwatt unit
DDD Pulse duration in nsec

Wavelength (nm)	Max. Average Power (mWatt, cw)	Max. Pulsed Power (mWatt, pulse)
375	5	7
405	200	300
450	50	75
635	35	50
658	80	120
690	35	50
785	70	100
810	150	230
830	200	300
850	150	230
980	200	300

Beam Quality:
< 1.3 M^2

Beam Divergence [1] [2]:
6 – 12 °

Beam Symmetry

Repetition Rate Frequency:
1 - 1000 kHz

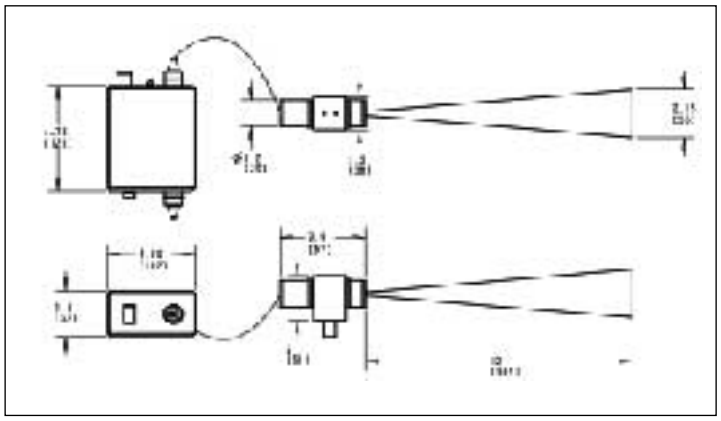
Pulse Duration [3]:
2, 5, 10, 20, 50, 100 nsec

[1] Divergence value depends on selected device wavelength and power

[2] Collimated output available upon request

[3] Pulse duration is fixed for a given product, selectable at time of ordering

Dimensions	L x W x H (**mm**)	Weight (**kg**)
Control Box	120 x 100 x 55	0.5
Laser Head	50 x 100 x 40	0.5



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