

Brilliant Eazy

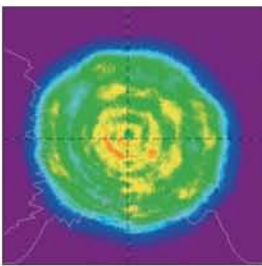


Compact Q-Switched Nd: YAG oscillator with super gaussian resonator

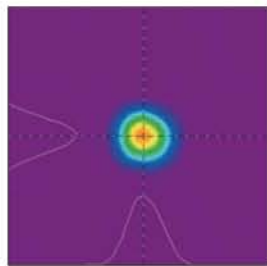
Beam diameter : 6 mm - 1 flashlamp - air / water heat exchanger

Extremely compact power supply - Detachable cables - Interchangeable harmonic generators

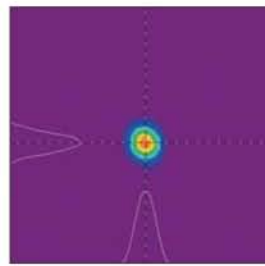
Beam profile in near field
@ 1064 nm, 10 Hz



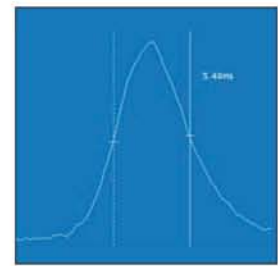
Beam profile in far field
@ 1064 nm, 10 Hz



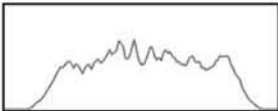
Beam profile in far field
@ 532 nm, 10 Hz



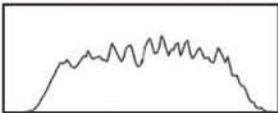
Temporal profile
@ 1064 nm, 10 Hz



Horizontal Cursor Profile



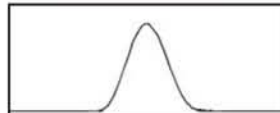
Vertical Cursor Profile



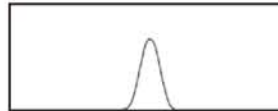
Horizontal Cursor Profile



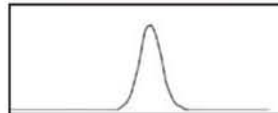
Vertical Cursor Profile



Horizontal Cursor Profile



Vertical Cursor Profile



Optical laser head :
(H x L x W)

5 kg (11.02 lb)
136 x 469 x 80

Integrated Cooling and Electronics :
(H x L x W)

14 kg (31 lb)
360 x 435 x 133

Harmonic generation module including separation package (each) :
(H x L x W)

2,1 kg (4.63 lb)
118 x 158 x 78

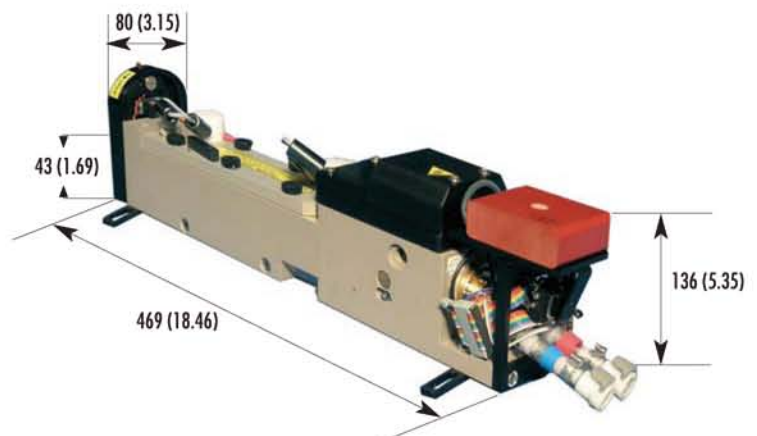
Remote control

195 x 100 (7.68 x 3.94)

All dimensions are in mm (inch).



External synchronization flexibility : flashlamp and Q-Switch control through TTL signals, RS232 or remote box.
Reduced warm-up time: heating element in coolant reservoir



Brilliant Eazy Specifications

| | | | | |
|--|------------|----------|---|--|
| Resonator | GRM | | | |
| Repetition rate (Hz) | 10 | | | |
| Energy per pulse (mJ) | 1064 nm | 330 | Measured with a calibrated wattmeter | |
| | 532 nm | 165 | | |
| | 355 nm | 60/90* | | *High energy UV option |
| | 266 nm | 35 | | |
| | 213 nm | ** | | ** On request |
| Energy stability - shot to shot (%) | 1064 nm | ±2 (0.6) | Peak to peak, 100% of the shots - (RMS) | |
| | 532 nm | ±4 (1.3) | | |
| | 355 nm | ±6 (2) | | |
| | 266 nm | ±8 (2.6) | | |
| Power drift (%) | 1064 nm | ±3 | Over 8 hours, without readjustment of phase-matching, 18°C < T < 28°C | |
| | 532 nm | ±3 | | |
| | 355 nm | ±3 | | |
| | 266 nm | ±6 | | |
| Pulse duration (ns) | 1064 nm | ~5 | FWHM, fast photodiode and 1GHz scope | |
| | 532 nm | ~4 | | |
| | 355 nm | ~4 | | |
| | 266 nm | ~4 | | |
| Linewidth (cm ⁻¹) | 1064 nm | 0.7 | FWHM, fast by a grating spectrometer with a 0,045 cm ⁻¹ resolution | |
| | 532 nm | 1.4 | | |
| Jitter (ns) | 1064 nm | ±1 | With respect to Q-Switch trigger, measured at half-width of 500 accumulated shots | |
| Pointing stability (µrad) | 1064 nm | < 50 | Measured by SPIRICON LBA- PC, RMS, on 200 pulses at the focal plane of a 2 m focus lens | |
| | 532 nm | < 50 | | |
| | 355 nm | < 50 | | |
| | 266 nm | < 50 | | |
| Divergence (mrad) | 1064 nm | < 0.5 | Full angle, at 1/e ² of the peak, 85% of total energy | |
| Polarization ratio (%) | 1064 nm | > 90 | Horizontal polarization | |
| Beam diameter (mm) | 1064 nm | ~6 | At the output of the laser | |
| Focusability (times Diffraction Limit) | 1064 nm | < 2 | At 1/e ² of the peak, by SPIRICON LBA-PC | |
| Spatial profile (fit to gaussian) | | | | |
| | Near field | 1064 nm | 0.7 | At 1 m from the laser output |
| | Far field | 1064 nm | 0.95 | At focal plane of a 2 m focus lens Least square fit to Gaussian (perfect fit = 1) |



Service requirement

Power : 100-240V, 10A, 50/60Hz.

Double pulse option is available. Contact us for more information.

Cable length

3 m (10 feet)

Shipment boxes : H x L x W in cm (inch) - Laser head : 37 x 105 x 27 (12.2 x 24.8 x 12.2)

Electronics : 34 x 72 x 50 (13.4 x 28.3 x 20)



VISIBLE AND INVISIBLE LASER RADIATION
AVOIEE EYE OR SKIN TO DIRECT
OR SCATTERED RADIATION.

CLASS I LASER RADIATION PRODUCT

| | |
|---------------------|--------------|
| Max Average Power | : 20W |
| Max Energy/pulse | : 2J |
| Pulse duration | : < 20ns |
| Emission Wavelength | : 190/4000nm |

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