

# Brilliant *EaZy*

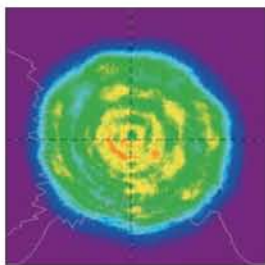


## Compact Q-Switched Nd : YAG oscillator with super gaussian resonator

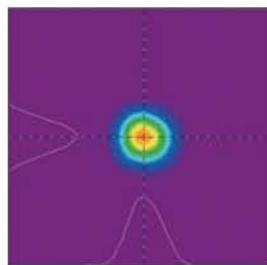
Beam diameter : 6 mm - 1 flashlamp - air/water heat exchanger

Extremely compact power supply - Detachable cables - Interchangeable harmonic generators

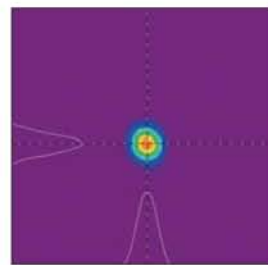
Beam profile in near field @ 1064 nm, 10 Hz



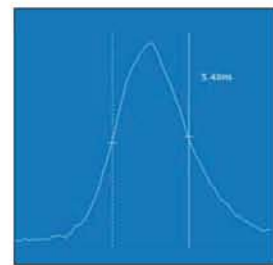
Beam profile in far field @ 1064 nm, 10 Hz



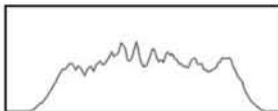
Beam profile in far field @ 532 nm, 10 Hz



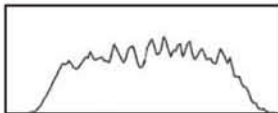
Temporal profile @ 1064 nm, 10 Hz



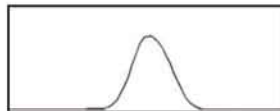
Horizontal Cursor Profile



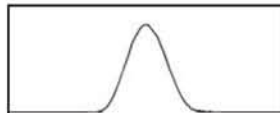
Vertical Cursor Profile



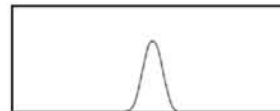
Horizontal Cursor Profile



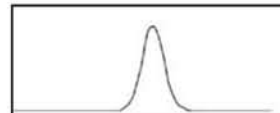
Vertical Cursor Profile



Horizontal Cursor Profile



Vertical Cursor Profile



**Optical laser head :**

(H x L x W)

5 kg

(11.02 lb)

136 x 469 x 80

(5.35 x 18.46 x 3.15)

**Integrated Cooling and Electronics :**

(H x L x W)

14 kg

(31 lb)

360 x 435 x 133

(14.2 x 17.14 x 5.23)

**Harmonic generation module including separation package (each) :**

2w, 2w/3w, 2w/4w (H x L x W)

2,1 kg

(4.63 lb)

118 x 158 x 78

(4.65 x 6.2 x 3.07)

**Remote control**

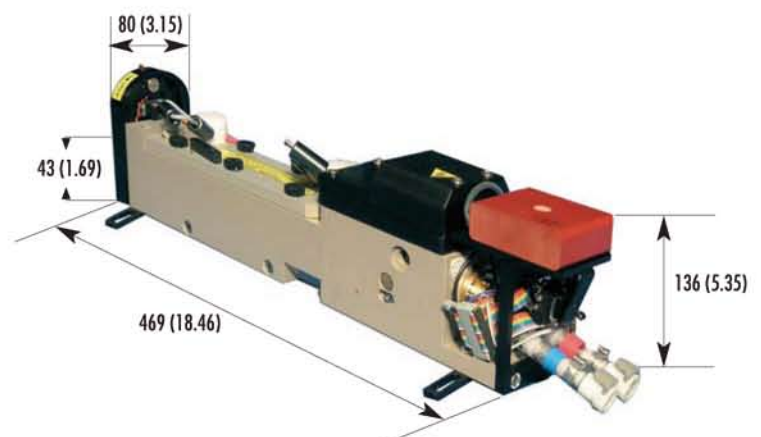
All dimensions are in mm (inch).

195 x 100

(7.68 x 3.94)



**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

<b>Resonator</b>	GRM			
<b>Repetition rate (Hz)</b>	10			
<b>Energy per pulse (mJ)</b>	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	
<b>Energy stability - shot to shot (%)</b>	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)		
<b>Power drift (%)</b>	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		
<b>Pulse duration (ns)</b>	1064 nm	~5	FWHM, fast photodiode and 1GHz scope	
	532 nm	~4		
	355 nm	~4		
	266 nm	~4		
<b>Linewidth (cm<sup>-1</sup>)</b>	1064 nm	0.7	FWHM, fast by a grating spectrometer with a 0,045 cm <sup>-1</sup> resolution	
	532 nm	1.4		
<b>Jitter (ns)</b>	1064 nm	±1	With respect to Q-Switch trigger, measured at half-width of 500 accumulated shots	
<b>Pointing stability (µrad)</b>	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		
<b>Divergence (mrad)</b>	1064 nm	< 0.5	Full angle, at 1/e <sup>2</sup> of the peak, 85% of total energy	
<b>Polarization ratio (%)</b>	1064 nm	> 90	Horizontal polarization	
<b>Beam diameter (mm)</b>	1064 nm	~6	At the output of the laser	
<b>Focusability (times Diffraction Limit)</b>	1064 nm	< 2	At 1/e <sup>2</sup> of the peak, by SPIRICON LBA-PC	
<b>Spatial profile (fit to gaussian)</b>				
	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)

