

Luce

Q-Switched Diode Pumped Solid State Laser

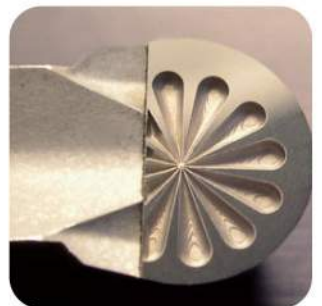


Features

- Up to 40 W
- 200 kW peak power
- Up to 200 kHz repetition rate
- @1064 nm @532 nm
- Electronic pulse energy modulation
- Sealed compact and rugged
- Monolithic design
- Field replaceable laser diodes
- Air cooling
- Low heat waste
- RS232 monitor port

Applications

- Material processing
- Marking
- Scribing
- Thin film removal
- Micro-machining
- Nonlinear optics





***Luce 40W 1064nm**

Luce family comprises innovative air-cooled CW DPSS Q-switched lasers aimed at the micromachining industrial applications.

Luce lasers offer superior operation flexibility, compactness, and performance/cost ratio to OEM system integrators.

The high peak power and the excellent beam quality of Luce-1064 make it the ideal source for the most demanding industrial and scientific applications.

Luce lasers are available both at 1064nm and at 532nm.

The Laser head is linked to its Pumping Unit via a fiber optic cable and a Q-Switch cable. This architecture allows to separate the diode laser unit from the resonator resulting in a miniaturized sealed and rugged laser head suitable to fit

small spaces.

Moreover, power electronics and pumping laser diodes dissipate their heat far away from the resonator unit.

Long lifetime fiber coupled pumping diodes are connected to a high power fiber optic cable that can be easily disconnected, thus simplifying integration, installation and service operations. The new electronic interface allows the user to integrate the laser according to the most recent safety standards for industrial machinery (EN 13849) and to monitor the laser status through a RS232 port.

A new version of the Control Box and a new proprietary Software Interface are available for simplified remote control and monitoring.

***Digital control box for simplified remote control**



OPTIONS AVAILABLE:

- Beam expanding and collimating optics
- Fiber coupling
- Red aiming beam
- Extended operating temperature range
- Extended frequency range
- Pulse width modulation
- Circular polarization
- Monitoring photodiode
- Remote control box and software interface
- AC-DC power supply

Luce

Q-Switched Diode Pumped Solid State Laser

Luce models	Luce DPSS 1064nm		Luce DPSS 532nm
Available models\ Max Average Output power	5W - 10W - 20W	30W - 40W	2W - 6W
Q-Switch repetition rate	10 kHz to 100 kHz (option: single shot to 200 kHz)		
CW operating mode	YES		NO
Pulsewidth	4 to 40ns		
Beam diameter	< 8 mm (option: customized internal or external BEX)		
Cooling	Air-cooled with thermostatic fan		
DC Voltage IN	24V	Dual 6.6 / 15V	24V
Laser head dimensions	14 x 8 x 6 cm ³ (5 x 3 x 2 in ³)	21 x 10 x 6 cm ³ (8 x 4 x 2 in ³)	27 x 8 x 6 cm ³ (11 x 3 x 2 in ³)
Pumping unit dimensions	26 x 22 x 8 cm ³ (10 x 9 x 3 in ³)	26 x 25 x 8 cm ³ (10 x 9 x 3 in ³)	26 x 22 x 8 cm ³ (10 x 9 x 3 in ³)
Pumping unit weight	< 8 kg (< 17 lbs)	< 10 kg (< 22 lbs)	< 8 kg (< 17 lbs)
Laser head weight	< 2 kg (< 5 lbs)	< 4 kg (< 9 lbs)	< 3 kg (< 7 lbs)



*Luce 532nm laser head