

Lucia

Q-Switched, Diode-pumped Nd:YLF Green Laser

FEATURES

- No DI water requirement
- Long-life diode module
- Rugged design, high reliability
- Average output up to 45 W
- Smooth beam profile at focus
- Best stability for scientific research
- Ideal for Ti:Sapphire pumping

APPLICATIONS

- Ultrafast pumping
- PIV
- Material processing
- Micromachining



The Lucia series are diode-pumped, Q-switched second harmonic Nd:YLF laser. It features field-proven long-life diode module and no DI water requirement for water chiller. The rugged enclosure design and optimum cavity design result in excellent output stability as well as super reliability for long-term operation. The Lucia-30-M delivers more than 20 mJ at 1 KHz and more than 30 W average power at 5 KHz. The Lucia-45-M delivers more than 28 mJ at 1 KHz and more than 45 W average power at 5 KHz. It is optimized for ultrafast Ti:sapphire amplifier pumping, such as UpTek Solutions Phidia-1 series.

The Lucia provides optimum solutions for scientific as well as industrial customers for applications, such as ultrafast amplifier pumping, PIV, material processing, micromachining, etc.

	Lucia-30-M	Lucia-45-M
Pulse Energy/Power	>20 mJ @ 1KHz	>28 mJ @ 1KHz / 45W @ 5KHz
Repetition Rate	1-10 KHz	1-10 KHz
Wavelength	527 nm	527 nm
Pulse width	<200 ns	<300 ns
Spatial Mode	$M^2 < 16$	$M^2 < 16$
Beam Size ($1/e^2$)	~ 3 mm	~ 3 mm
Energy Stability	<0.5 % RMS	<0.5 % RMS
Polarization	Linear, Horizontal	Linear, Horizontal

