LDY350

Diode Pumped Q-switched Nd:YLF Lasers

High Frequency Lasers for Industrial Applications

Features

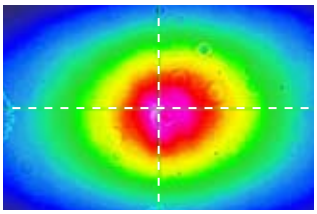
- *High Energy at 527nm*
- *Rugged industrial design*
- *0-20kHz continuously variable*
- *RS232 control with full software support*

Applications

- *Laser Marking*
- *Ti:S Pumping*
- *Flow Visualisation*
- *Dye Laser Pumping*
- *PIV*

The LDY350 series are frequency doubled, diode pumped Nd:YLF laser systems, ideally suited to imaging, laser marking and pump applications. At 527nm output energies of up to 30mJ at 1kHz are available.

The lasers are built around a rugged self supporting invar rail that bestows excellent mechanical and optical stability. This, coupled with the proprietary resonator design, leads to excellent output beams that are spatially and temporally extremely smooth and stable, ensuring excellent pulse-to-pulse stability.

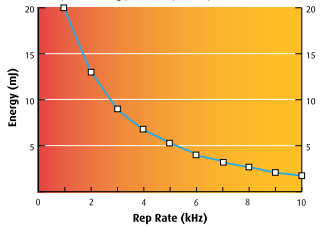


LDY352
Typical beam profile at 1kHz

The robust design of these lasers makes them ideally suited to the harshest of industrial and research applications alike.

The power supply and closed-circuit chiller are all housed in a compact 19"rack. The system can be controlled either by the in-built LCD interface or via RS232 with the supplied software suite or dll. External triggering of the lasers is accessible via a TTL interface.

LDY353
Output energy v. frequency at 527nm



Litron Lasers

TECHNICAL DATA

Model	LDY351	LDY352	LDY353	LDY354
Repetition rate (kHz)	0.2-20	0.2-20	0.2-20	0.2-20
Output Energy				
at 1kHz at 527nm (mJ)	10	15	20	30
Output Power Max. (W)	15	25	40	50
Parameter				
Pulse - pulse stability (±%)	1	1	1	1
Beam diameter (mm) (4)	5	5	5	5
Beam divergence (mrad) (5)	<3	<3	<3	<3
Pulse width @ 1kHz (ns)	~150	~150	~150	~150
M^2x, M^2y	12, 7	12, 7	12, 7	12, 8
Services				
Voltage(1) (VAC)	220-250	220-250	220-250	220-250
Frequency(2) (Hz)	50 or 60	50 or 60	50 or 60	50 or 60
Power	Single Phase	Single Phase	Single Phase	Single Phase
Consumption (W)	<2000	<2000	<2000	<2000
Power Supply	19" 10U Rack	19" 10U Rack	19" 10U Rack	19" 10U Rack

(1) 110VAC option requires autotransformer to be specified on order.
(2) 50 or 60Hz to be specified on order.
(3) 0-80% non condensing atmosphere
(4) Beam diameter is achieved with output telescope. Standard diameters quoted. Other diameters are available on request. In all cases M^2 is unchanged.
(5) At specified beam diameter.
(6) M^2 values differ in the x and y directions.

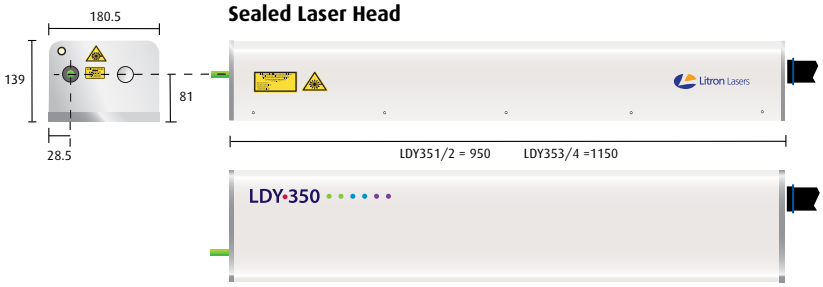
Ambient Requirements	
Max. air temp (°C)	35
Min. air temp (°C)	5
Humidity % (non condensing)	0-80
Ambient heating (kW)	<2.5

System Dimensions	
Laser Head	
mm	180.5 (W) x 139(H) x 950-1150 (L)
Inches	7.1 (W) x 5.5 (H) x 37.4-45.2 (L)
PSU	
mm	605 (W) x 700 (D) x 605 (H)
Inches	23.8 (W) x 27.6 (H) x 23.8 (L)

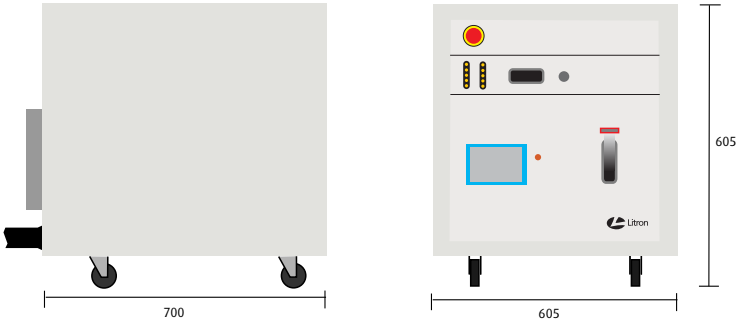
MECHANICAL DATA

All dimensions shown in mm unless stated.

Sealed Laser Head



Rack-mount PSU



Our policy is to improve the design and specification of our products. The details given in this document are not to be regarded as binding.

HEAD OFFICE
Litron Lasers Ltd
8 Consul Road
Rugby
Warwickshire CV21 1PB
England

T +44 (0)1788 574444
F +44 (0)1788 574888
E sales@litron.co.uk

Litron Lasers
www.litronlasers.com