

LD30-527

Diode Pumped Q-switched Nd:YLF Laser
High Repetition Rate Laser for Ti:Sa Pumping



Applications

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

The **LD30-527** is a frequency doubled, diode pumped Nd:YLF laser, ideally suited for pump applications. Output energies of up to 30mJ at 527nm at 1kHz are available.

The laser is built around a rugged self supporting Invar rail for excellent mechanical and optical stability. This, coupled with the proprietary resonator design, ensures excellent output beams that are spatially and temporally extremely smooth and stable.

The robust design of the LD30-527 makes it ideally suited to the most demanding of research applications.

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

Key Features

- *High energy at 527nm*
- *Rugged industrial design*
- *1kHz repetition rate*
- *RS232 control with full software support*

System benefits include

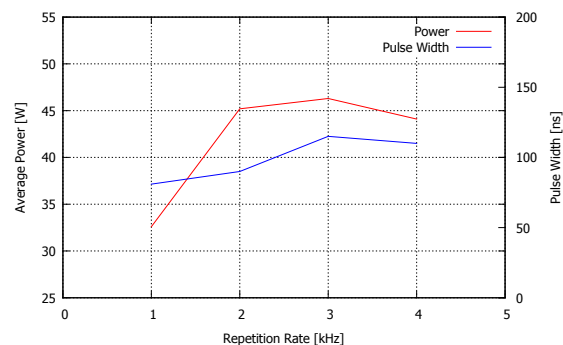
- *Maintenance free*
- *Fast return on investment*
- *Fully integrated power supply and chiller*
- *LUCi touchscreen controller*
- *RS232 interface with GUI software included*
- *Ruggedised laser head for harsh environments*
- *Worldwide warranty and service*

TECHNICAL DATA

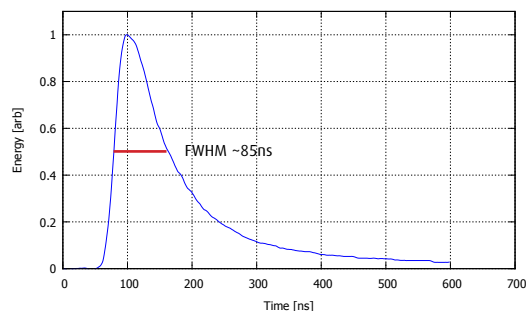
Model	LD30-527
Output energy at 1kHz at 527nm (mJ)	30
Max. output power at 3kHz at 527nm (W)	45
Parameter	
Pulse to pulse stability (+-%)	1
Beam diameter (mm) ⁽¹⁾	5
Beam divergence (mrad) ⁽²⁾	1.5
Beam circularity (%)	85
Pulse width at 1kHz (ns)	>85
M ² _x , M ² _y	11,7
SYSTEM	
Operation	
Control ⁽³⁾	LUCi/RS232
Q-switch trigger and sync	TTL
Services	
Voltage (VAC)	220-250
Frequency (Hz)	50 or 60
Power	Single Phase
Ambient (°C) ⁽⁴⁾	5-35
Ambient heating (kW)	<2.5
Power supply and integrated chiller	19" 18U Rack
Umbilical length (m)	3
Warm up time from cold start (mins)	<20
Weights	
Head (kg)	45
PSU including chiller (kg)	140

- (1) At output window.
 (2) At specified beam diameter.
 (3) Full software suite and programming tools supplied.
 (4) 0-80% non condensing atmosphere, laser head only.

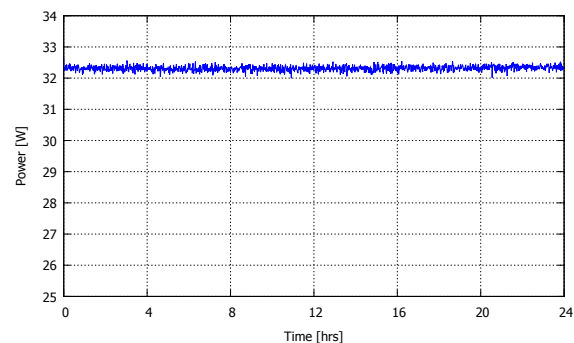
LD30-527 Performance curves at 527nm



LD30-527 Pulse shape at 1kHz

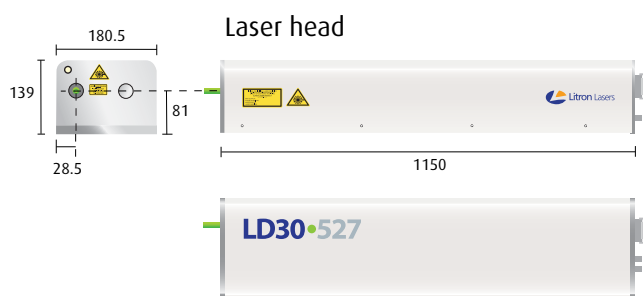


LD30-527 Stability at 1kHz

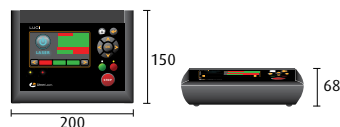


MECHANICAL DATA

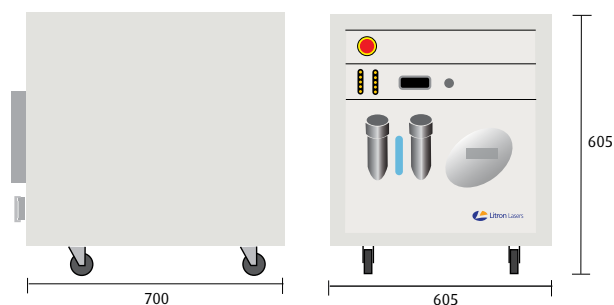
All dimensions shown in mm



LUCi Remote Control Box



Fully integrated rack-mounted PSU and chiller



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.

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