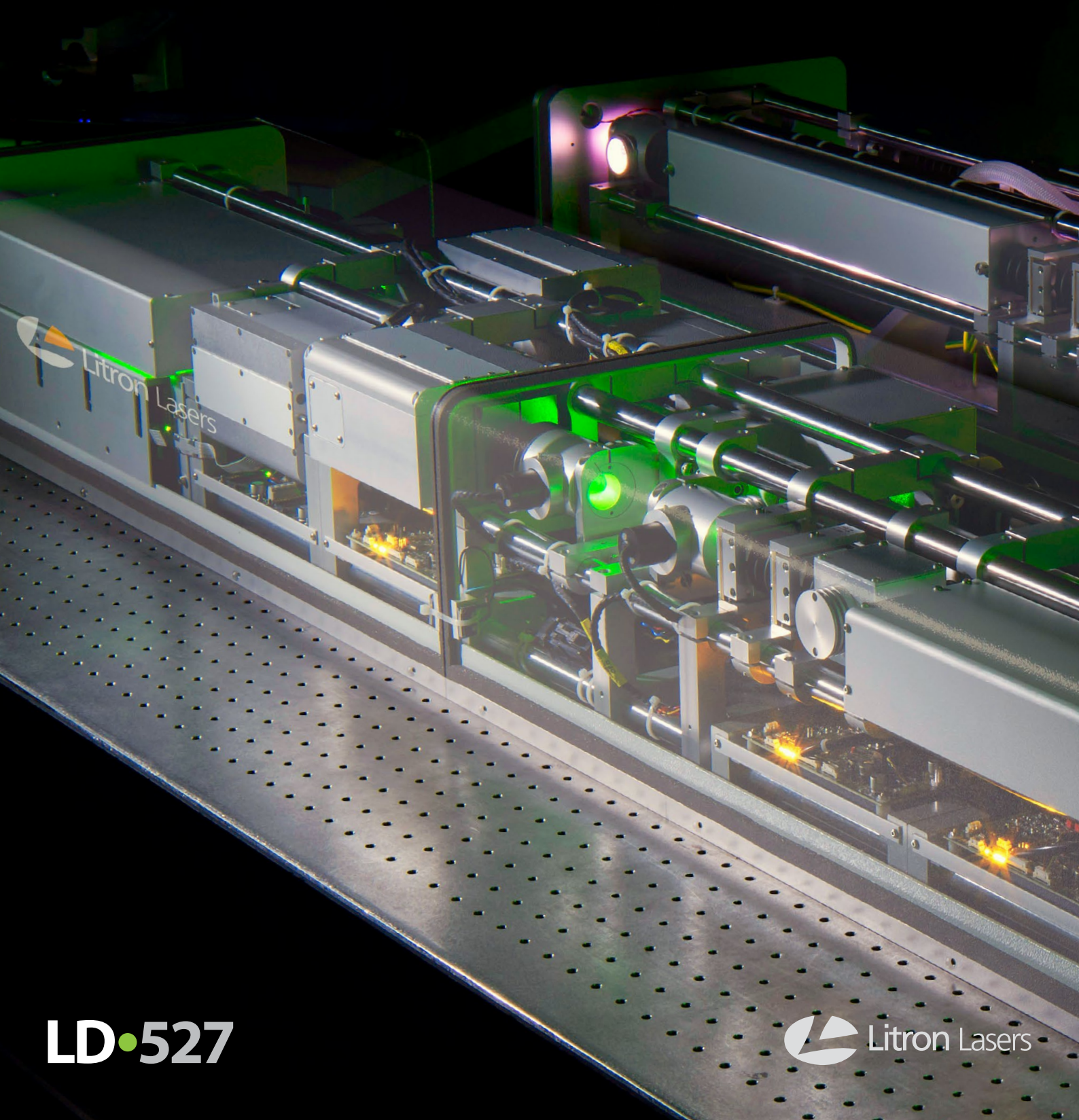
LD-527 SERIES

Diode Pumped Q-switched Nd:YLF Lasers



LD•527

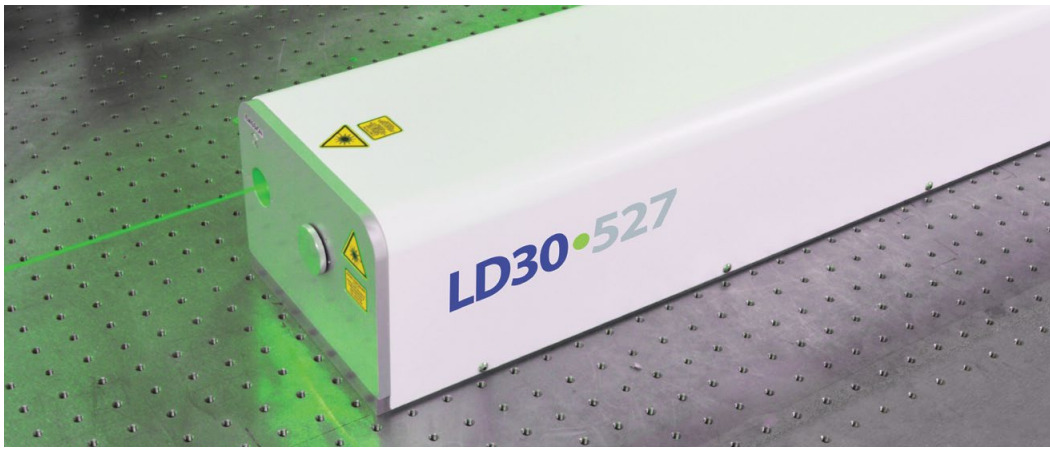
Litron Lasers

LD-527

Diode Pumped Q-switched Nd:YLF Laser

High Repetition Rate Laser for Ti:Sa Pumping

LD•527



APPLICATIONS

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

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

The lasers are 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 LD-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***

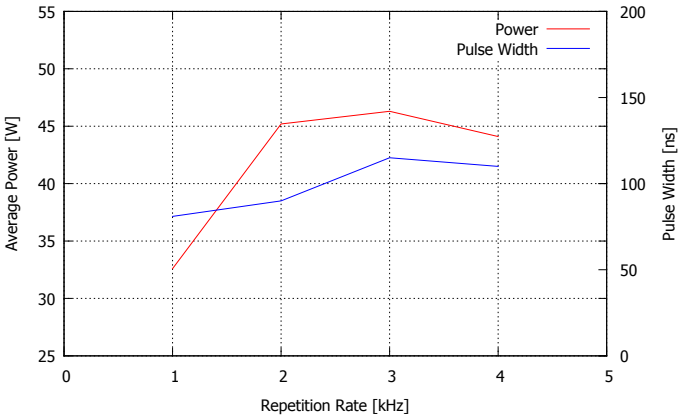
TECHNICAL DATA

Model	LD10-527	LD15-527	LD20-527	LD25-527	LD30-527
Repetition Rate (kHz)	200Hz to 20kHz				
Output Energy at 1kHz at 527nm (mJ)	10	15	20	25	30
Parameters					
Pulse – pulse stability (±%)	1	1	1	1	1
Beam diameter (mm) (1)	5	5	5	5	5
Beam divergence (mrad) (2)	<2.5	<2.5	<2.5	<2.5	<2.5
Pulse width @ 1kHz (ns)	<210	<160	<180	<140	<120
M^2	<12	<12	<12	<12	<12
Pointing Stability (µrad) (3)	<25	<25	<25	<25	<25
Weights					
Head (kg)	26	43	46	46	46
PSU (kg)	150	150	150	150	150

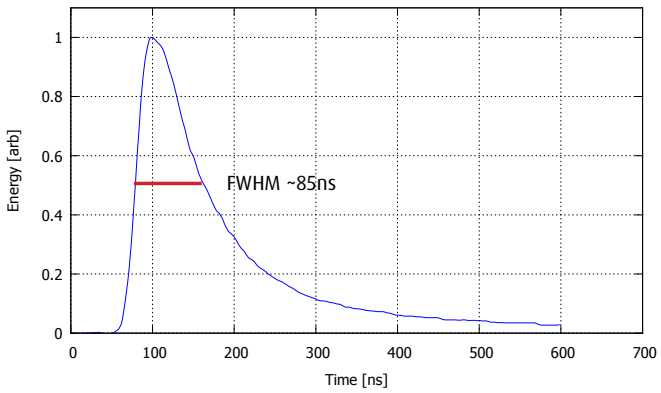
(1) Beam diameter is achieved with output telescope.
(2) At specified beam diameter.
(3) Half angle.
(4) 110VAC option requires autotransformer to be specified on order.
(5) 50 or 60Hz to be specified on order.
(6) 0 to 80% non-condensing atmosphere.

Services	
Voltage (VAC) (4)	220-250
Frequency (Hz) (5)	50 or 60
Power	Single Phase
Ambient (°C) (6)	5-35
Power Supply	19" 13U Rack

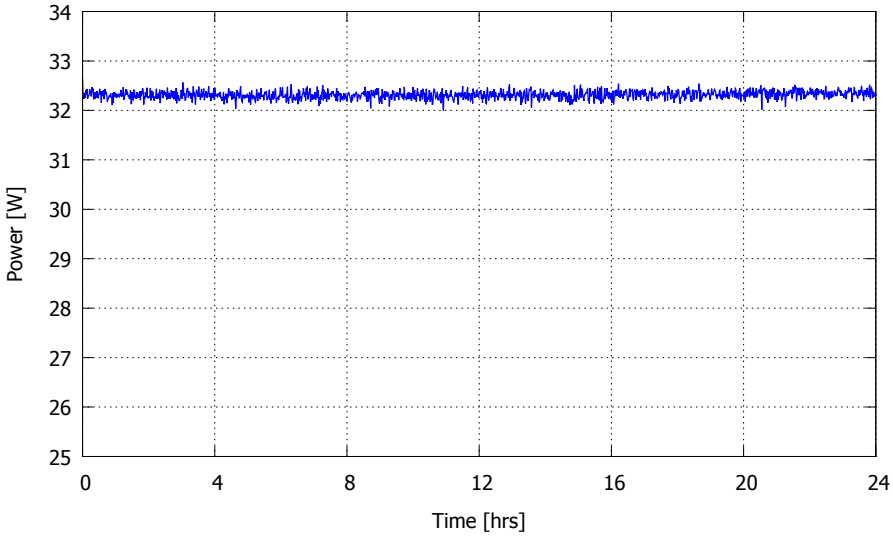
LD30-527 Performance curves at 527nm



LD30-527 Pulse shape at 1kHz



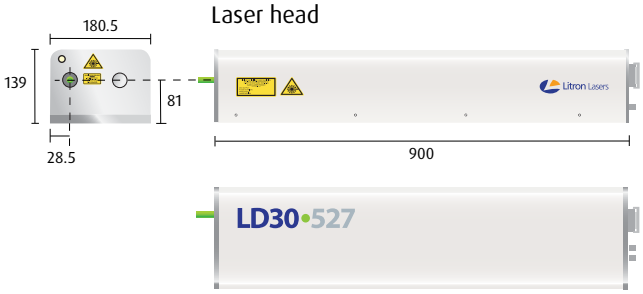
LD30-527 Long term stability at 1kHz



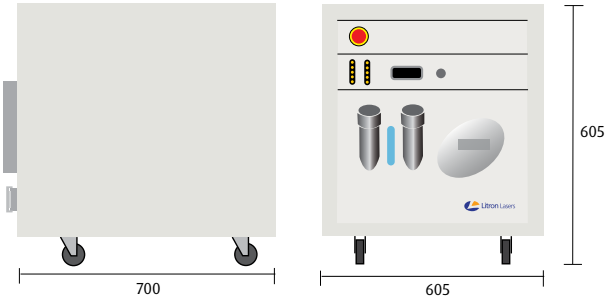
MECHANICAL DATA

All dimensions in mm unless stated

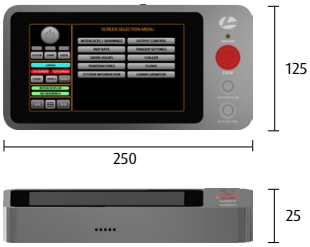
Laser head



Fully integrated rack-mounted PSU and chiller



LUCi Controller



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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