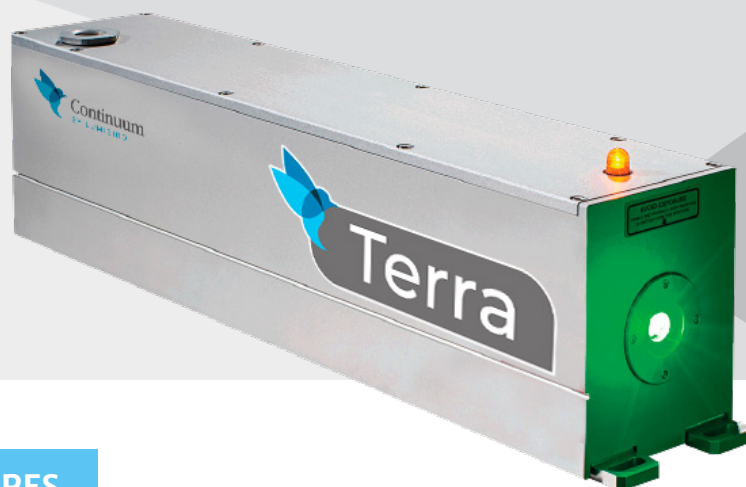


TERRA

Diode-pumped Nd:YLF laser, kHz repetition rates



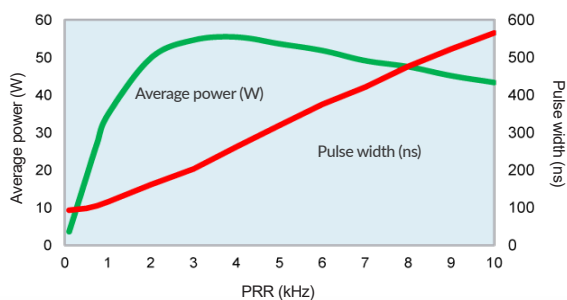
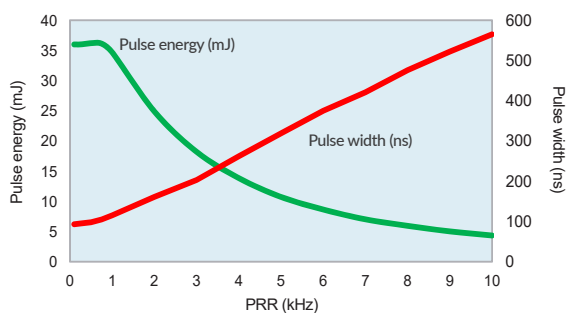
MAIN FEATURES

- > 30 mJ at 1 kHz
- Average power > 50 W @ 3 kHz
- Repetition rates up to 10 kHz
- Exceptional beam pointing and power stability
- Compact, rugged & hermetically sealed laser head
- Quick & easy diode module replacement (3 min)
- Optimized for ultrafast amplifier pumping

MAIN APPLICATIONS

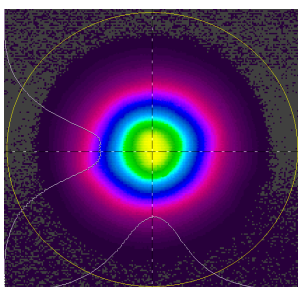
- TI:SAPPHIRE PUMPING
- LIDAR
- COMBUSTION ANALYSIS
- LIF
- STENT/GLASS/PCB/FINE METAL CUTTING
- DIAMOND/
GEMSTONE PROCESSING

Performances

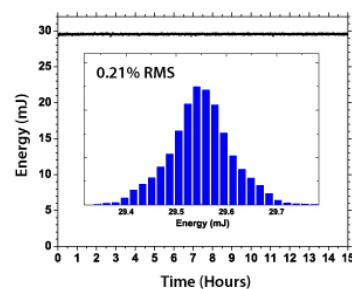


Terra 527-50

Typical beam profile



Typical energy stability



Terra 527-40

Many options and configurations are available. Please contact Lumibird to find the best match for your needs and compatibility between options.

SPECIFICATIONS

	Terra 527-50	Terra 527-40	Terra 527-30	Terra 527-20
Wavelength (nm)	527			
Pulse repetition rate (kHz) ⁽¹⁾	0.1 - 10			
Energy at 0.1 - 1 kHz (mJ)	30	25	20	15
Average power @ 3 kHz (W)	50	40	30	20
Pulse-to-pulse energy stability (% RMS)	< 0.5			
Pulse width (ns)	< 140	< 150	< 160	< 170
Beam diameter at output (mm) ⁽²⁾	~ 2.5			
Beam divergence (mrad) ⁽²⁾	8			
Pointing stability (μrad RMS)	< 25			
Time jitter (ns RMS)	< 3			
Polarization	Horizontal			
Beam quality (M ²)	< 12			
Transverse mode	MM			

All specifications at 1 kHz unless otherwise noted

(1) Single shot to 0.1 kHz available with external trigger

(2) Measured at 13.5 % level at output window

OTHER INFORMATION

Power requirements	Power supply	Single phase: 200-240 VAC, 50/60 Hz Operating current: 5 A, max current: 10 A
	Chiller	Single phase: 230 ± 10% VAC, 50/60 Hz Operating current: 10 A, max current: 15 A
Cooling	Water to air - Water to water cooling options available	
Operating temperature	+ 15 °C to + 35 °C	
Storage temperature ⁽¹⁾	- 20 °C to + 50 °C	
Relative humidity	8 - 80 %, non-condensing	
Cable length (m)	3.65	
Weight (kg)	Laser head	9
	Power supply	17.7
	Chiller	55
Control interface	Serial interface	RS 232
	Rear connections	External beam enable, external trigger
	Control software	MS Windows-based laser commander

(1) System flushed and drained with ethylene glycol/water mixture

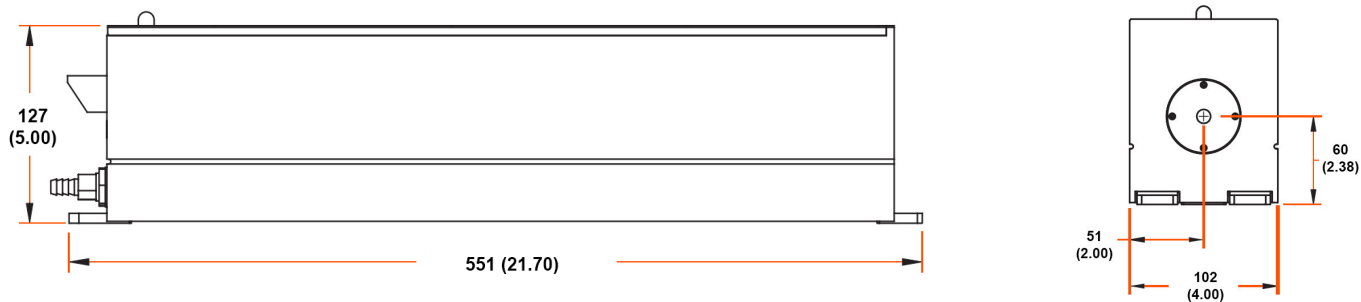
TERRA

Diode-pumped Nd:YLF laser, kHz repetition rates

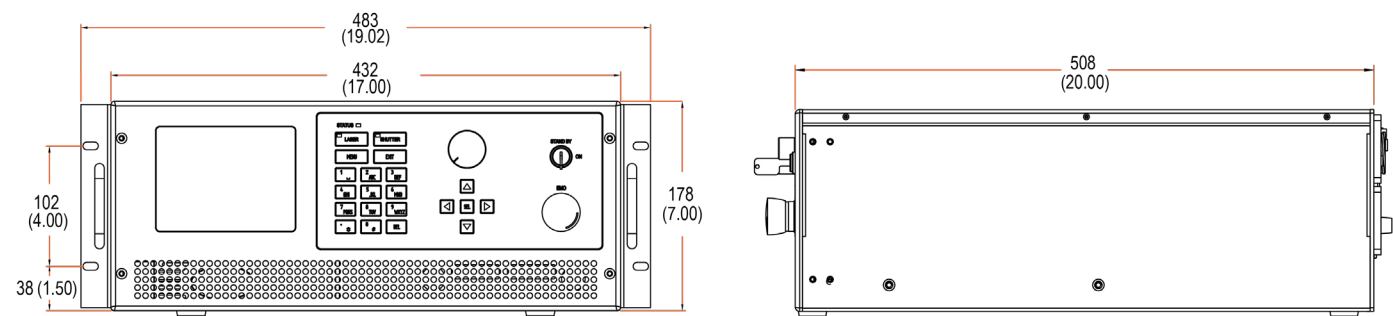


Laser head

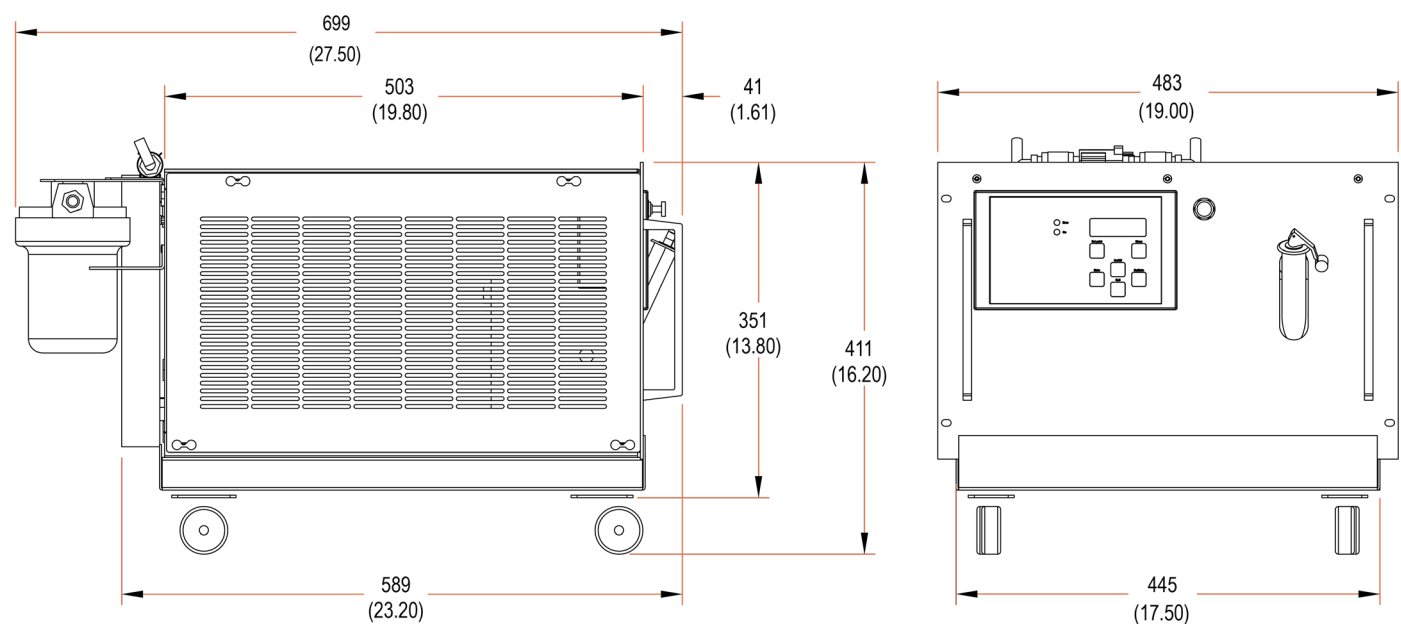
Dimensions in mm (inches)



Power supply



Chiller



DANGER
INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT

Many options and configurations are available. Please contact Lumibird to find the best match for your needs and compatibility between options.



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