



JADE 2

Diode-Pumped Compact Series

FEATURES

- 500 Hz to 3 kHz operation
- Up to 36 W at 527 nm
- Outstanding stability and focusability with $M^2 \sim 18$
- Computer control

APPLICATIONS

- Femtosecond amplifier pumping
- Material processing
- Instrumentation
- Scientific



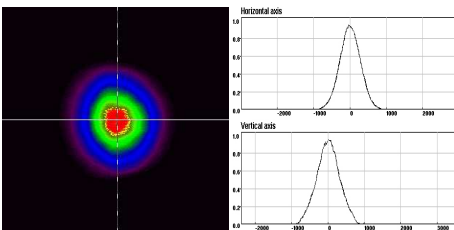
High energy, diode-pumped Nd:YLF laser

The JADE 2 is the latest generation of Nd:YLF laser providing more than 36 W at 527 nm.

It emits a low multi-mode beam ($M^2 \sim 18$) with circular, uniform and smooth quasi Gaussian intensity distribution which makes JADE 2 ideal for maximum efficiency in Ti:Sa amplifier pumping.

The JADE 2 is based on THALES latest developments in diode pumping heads renowned for their outstanding power stability. It features a patented pumping chamber ensuring an unprecedented short and long term power stability with consistent spatial beam performances regardless of pump power. The in-line short cavity design induces laser compactness and easiness of alignment and maintenance.

With diode-laser lifetimes of thousands of hours, JADE 2 stands out as the cost-effective leader in high repetition rate Nd:YLF lasers.



Typical Jade 2 beam profile at 527 nm

> JADE 2

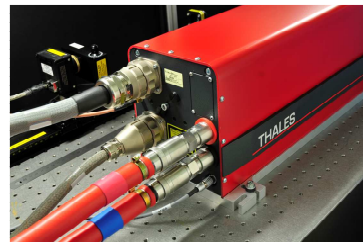
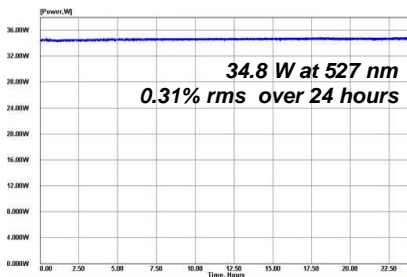
Diode-Pumped Compact Series

Specifications

Wavelength (nm)	527	527
Repetition rate ⁽¹⁾	1 kHz	3 kHz
Energy per pulse (mJ)	> 25	> 12
Average power (W) ⁽²⁾	> 25	> 36
Typical pulse width (ns)	< 160	< 250
Pulse to pulse energy stability (% rms)	< 0.8	< 0.8
Typical M ²	18 +/- 2	18 +/- 2
Beam pointing stability (µrad)	+/- 30	+/- 30
Typical Beam size (mm) at waist position	~ 3	~ 3
Beam profile	Multi-mode Gaussian	Multi-mode Gaussian
Polarization	Horizontal	Horizontal

(1) Factory preset at one repetition rate (2) Other average power available on request

Long term stability measurement (typical)



Industrial interface for easy and reliable operation

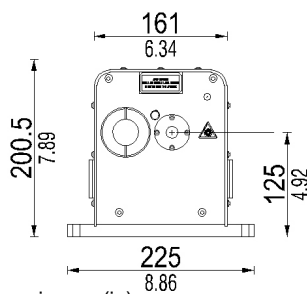
Utilities and environment requirements

Voltage	208 – 230 VAC +/-5% single φ		
Frequency	50 – 60 Hz		
Water^(*)	Flow	> 10 L/min	> 2.7 gal /min
	Static pressure	3-5 bars	43.5-72 psi
	Temperature	15-17°C	
Operating systems	Windows 98, 2000, NT, XP		

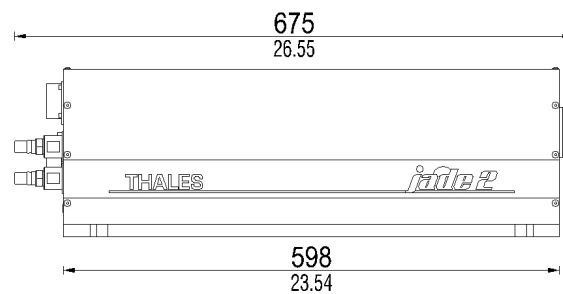
* Water /Water chiller

Physical characteristics (Size: H x W x L)

Power supply	25.6 x 23.6 x 32.7 in	65 x 60 x 83 cm
Cooling unit	14.6 x 17.4 x 28.4 in	37 x 44 x 72 cm



Dimensions are given in mm (in)



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