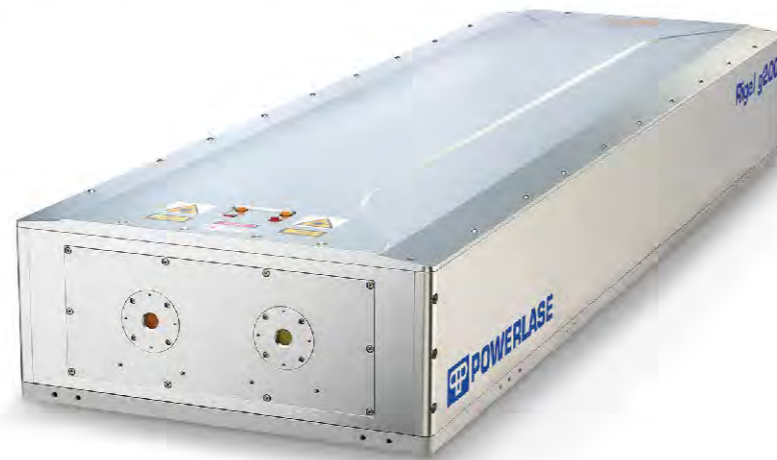




# Rigel g200

## 532nm High Power Diode-Pumped Short-Pulse Laser

A Q-switched, intra-cavity frequency doubled laser, delivering high average powers up to 200W in an unpolarised multi-mode beam at a wavelength of 532nm. With a well proven rugged head design, state of the art control and power supply architecture, simple synchronisation with OEM equipment and process lines makes this platform ideally suited to high volume industrial applications.



Rigel g100

Rigel g200

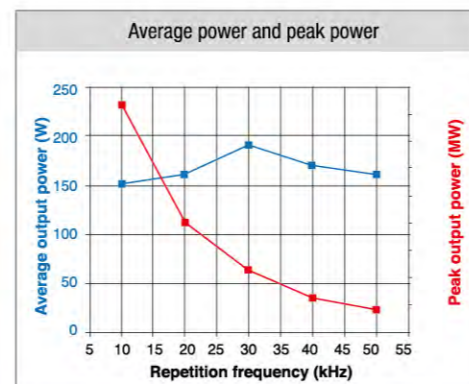
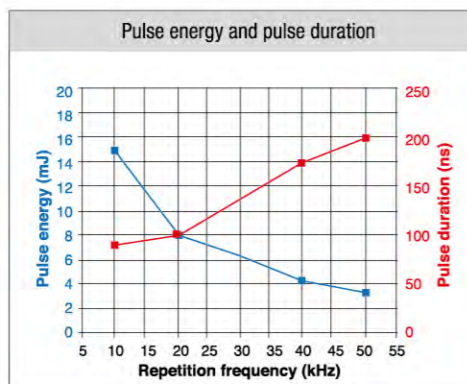
Rigel g400

### Features

- Energy per Pulse > 10mJ
- 5 - 50kHz Repetition Rate Available
- M<sup>2</sup> between 20 and 25
- Excellent Stability
- Condition Monitoring
- Optional Fibre Delivery (Round or Square)
- Optional Computer Controlled Attenuation

### Applications

- Photovoltaic processing
- Poly-silicon annealing
- Hard materials processing
- Micro machining
- Ti:sapphire pumping



## Specified Laser Performance

	Rigel g200-LRR		Rigel g200-HRR		
Pulse Repetition Freq. (kHz)	10	20	30	40	50
Average Power (W)	150	160	195	180	175
Pulse Energy (mJ)	15.5	8.0	6.5	4.5	3.5
Variable Pulse Duration (ns)	90	100	140	175	200
Divergence (mrad, 1/e <sup>2</sup> FA)	6	7	8		
M <sup>2</sup>	20 - 25		25		
Typical Power Stability	± 2 % pk-pk		± 2 % pk-pk		
Polarisation	Polarised		Polarised		
Typical Fibre Option	200µm (Round or Square)		200µm (Round or Square)		

Rigel g100

Rigel g200

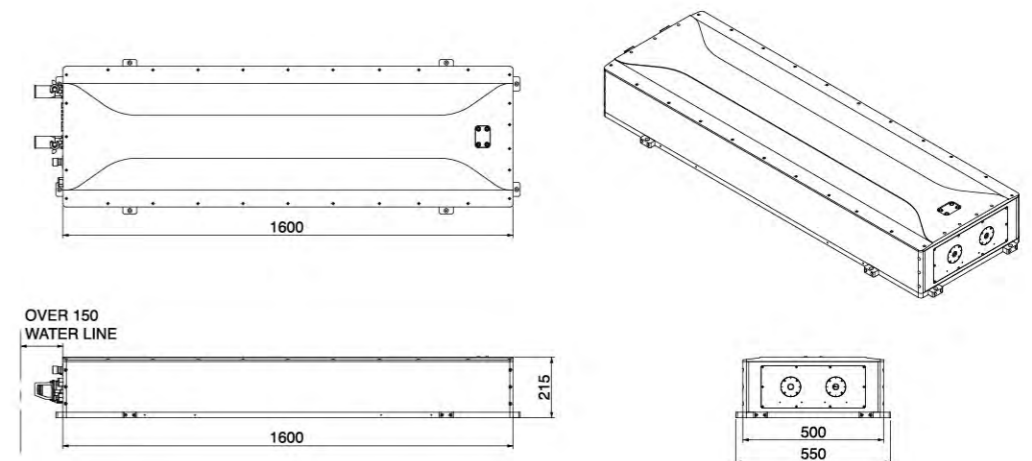
Rigel g400

## Facility Requirements

Supply Voltage	400 VAC (±10%)
Supply Frequency	50/60 Hz
Nominal Power Consumption	13 kVA
Cooling Water	20 litres/min at 11-17°C
Gas Purge	N <sub>2</sub> or Air (Grade N5.0, <1 ppm THC)
Laser Dimensions	1600 x 500 x 215mm
Control Rack Dimensions	1195 x 600 x 970mm (h x w x d)
Environmental Conditions	Temp. 15-32°C and RH <60% (90% max, non condensing)

Specifications subject to change without notice

### Dimensions



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