



Rigel i1600

1600W High Power, Diode Pumped, Short Pulse Laser

A 1.6 kW, Q-switched, DPSS laser, delivering high average power and high peak power at 1064 nm, unpolarised. With a well proven rugged head design, state of the art universal control system architecture and simple synchronisation with OEM equipment and process lines, this platform is ideally suited to high volume industrial applications.

Rigel i200

Rigel i400

Rigel i600

Rigel i800

Rigel i1000

Rigel i1600

Rigel i3200

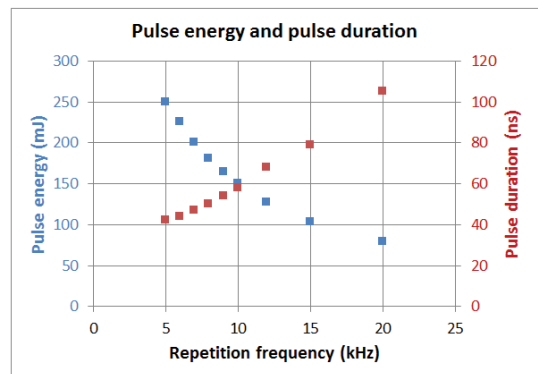
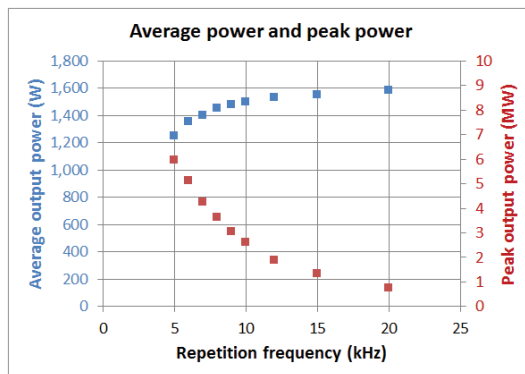


Features

- Pulse Energy Up To 250 mJ
- $M^2 = 30$
- Excellent Stability
- Condition Monitoring
- Optional Fibre Delivery (Round Or Square)
- Optional Computer Controlled Attenuation
- Optional Repetition Frequency Optimisation

Applications

- Material Processing
- Photovoltaic Processing
- Thin Film Removal
- Rapid Laser Patterning
- Extreme Ultraviolet (EUV) Generation





Typical Laser Performance

Pulse Repetition Freq. (kHz)	5	10	15	20
Average Power (W)	1250	1500	1550	1580
Pulse Energy (mJ)	250	150	103	79
Pulse Duration (ns)	42	60	80	105
Divergence (mrad, 1/e ² FA)	12			
M ²	30			
Power Stability (% , 1σ)	0.3			
Typical Fibre Core (µm)	Contact PPL			

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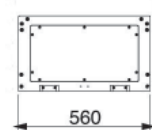
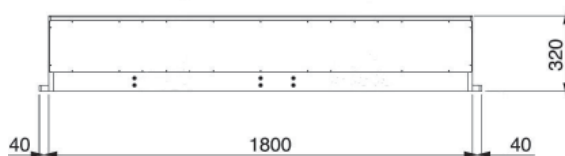
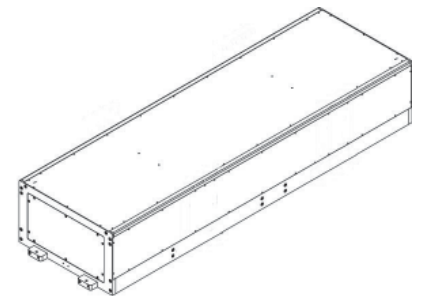
Rigel i3200

Facility Requirements

Supply Voltage	3-phase N+E, 220 or 400 VAC (±10%)
Supply Frequency	50 or 60 Hz
Nominal Power Consumption	29 kVA
Cooling Water	60 litres/min at 11 - 17°C
Gas Purge	N2 or Air (Grade N5.0, <1 ppm THC)
Laser Dimensions	1800 x 560 x 320 mm
Control Rack Dimensions	1195 x 600 x 970 mm (h w 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

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