



# Rigel i800E

## 800W High Power, Diode Pumped, Short Pulse Laser

An 800 watt, 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 i800E

Rigel i1200E

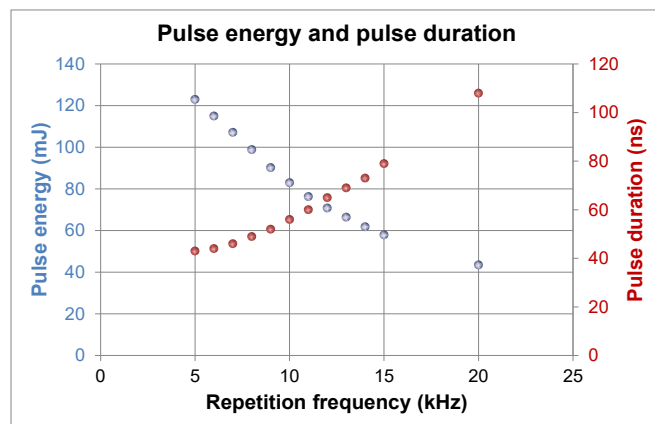
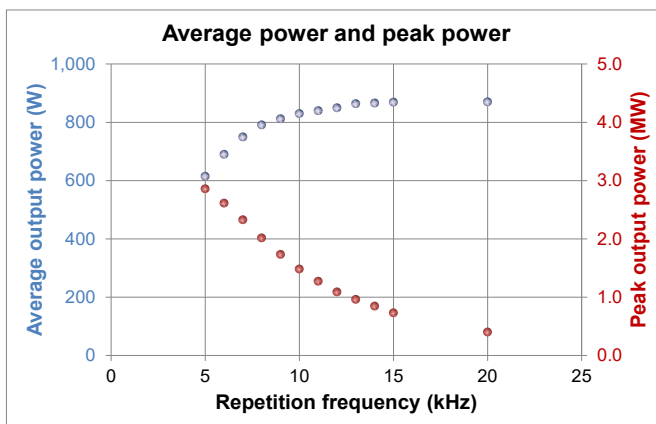
Rigel i1600E

### Features

- Pulse Energy Up To 120 mJ
- $M^2 = 30$
- Excellent Stability
- Condition Monitoring
- Fibre Delivery (Round or Square)
- Optional Computer Controlled Attenuation
- Optional Repetition Frequency Optimisation

### Applications

- LCD Production
- Photovoltaic Processing
- Thin Film Removal
- Rapid Laser Patterning
- Material Processing





## Typical Laser Performance

Pulse Repetition Freq. (kHz)	5	10	15	20
Average Power (W)	620	840	865	870
Pulse Energy (mJ)	124	84	58	44
Pulse Duration (ns)	42	60	80	105
Divergence (mrad, 1/e <sup>2</sup> FA)	12			
M <sup>2</sup>	30			
Power Stability (% , 1σ)	0.3			
Typical Fibre Core (μm)	800 (Square or Round)			

## Facility Requirements

Rigel i800E

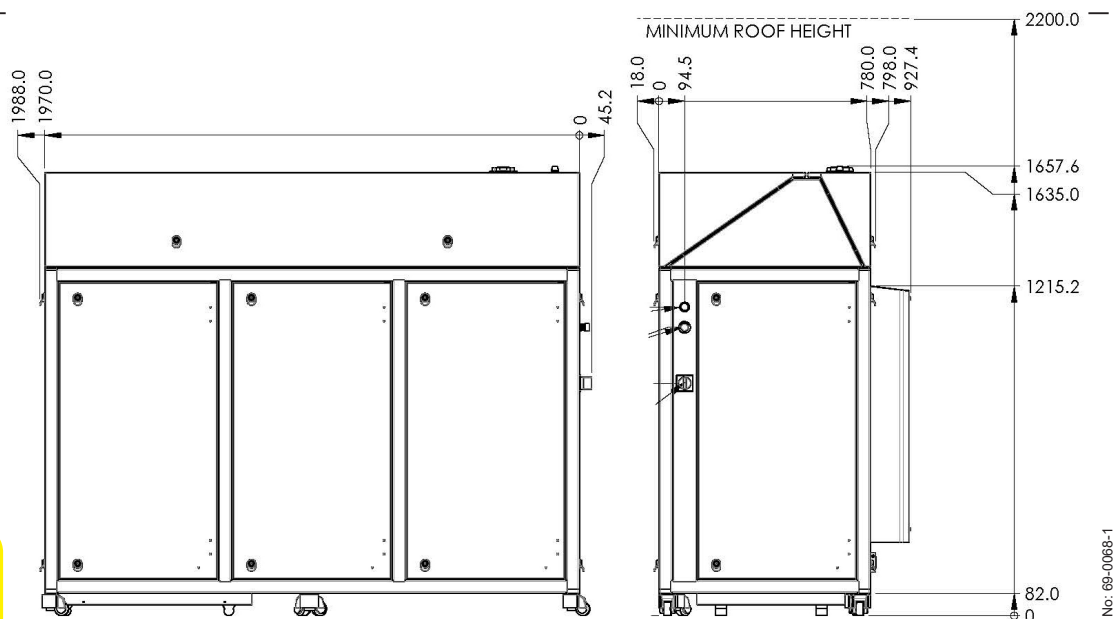
Rigel i1200E

Rigel i1600E

Supply Voltage	3-phase N+E, 220 or 400 VAC (±10%)
Supply Frequency	50 or 60 Hz
Nominal Power Consumption	18 kVA
Cooling Water	40 litres/min at 11 - 17°C
Gas Purge	Clean Dry Air (Grade N5.0, <1 ppm THC)
Laser Dimensions	1988 x 1657.6 x 927.4 mm
Environmental Conditions	Temp 15 - 50°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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