POWERLASE

Rigel g100c

PRELIMINARY

100W High Power, Diode Pumped, Short Pulse Laser

A Q–switched, intra-cavity frequency doubled laser, delivering high average powers up to 100 W in a linearly polarised multi-mode beam at a wavelength of 532 nm. 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 g100c

Rigel g200

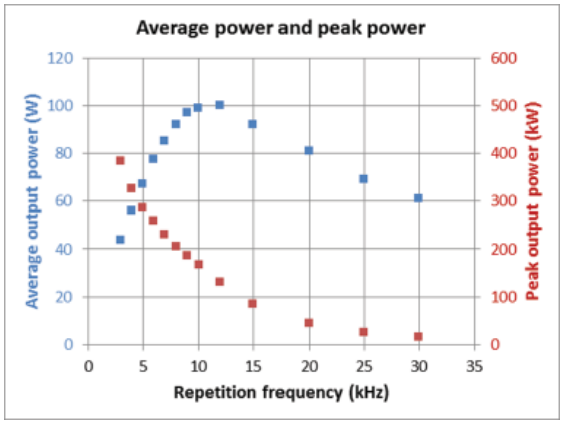
Rigel g400

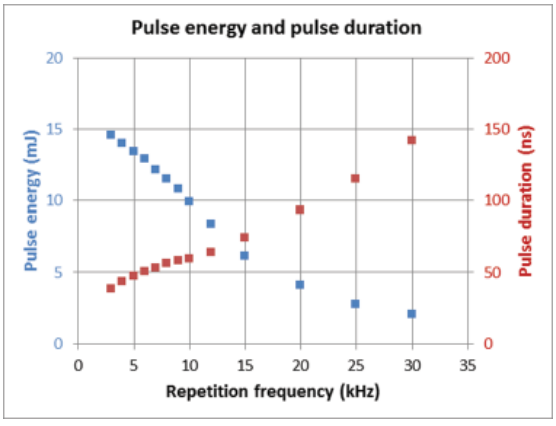
Features

- Pulse Energy Up To 15 mJ
- M^2 <25
- Linear Polarisation
- Excellent Stability
- Condition Monitoring
- Optional Repetition Frequency Optimisation

Applications

- Photovoltaic Processing
- Poly-Silicon Annealing
- Hard Materials Processing
- Micro Machining
- Ti:Sapphire Pumping





Doc No: 069-0058-1

POWERLASE

Typical Laser Performance

Frequency (kHz)	3	5	10	20	30
Power (W)	45	60	100	80	50
Pulse Energy (mJ)	15	12	10	4	2
Pulse Width (ns)	40	50	60	100	140
Peak Pulse Power (kW)	380	290	170	45	15
Divergence (mrad, $1/e^2$ FA)	6				
M^2	25				
Power Stability (%, 1σ)	1				

Rigel g100c

Rigel g200

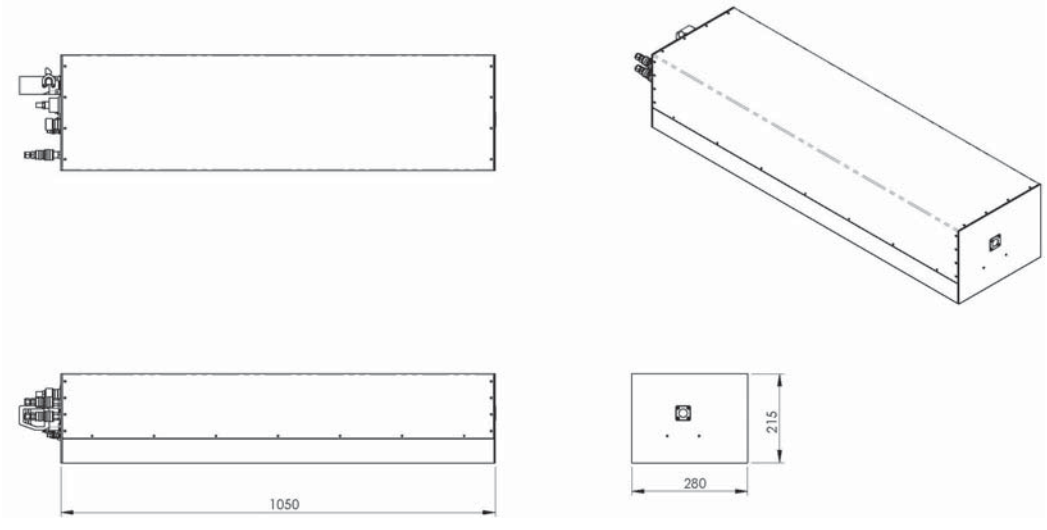
Rigel g400

Facility Requirements

Supply Voltage	1-phase N+E, 220 VAC (±10%)
Suppy Frequency	50 or 60 Hz
Nominal Power Consumption	7 kVA
Cooling Water	10 litres/min at 11 - 17°C
Gas Purge	N2 or Air (Grade N5.0, <1 ppm THC)
Laser Dimensions	1050 x 280 x 215 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

Doc No: 069-0058-1

Powerlase Photonics Ltd, Imperial House, Link 10, Napier Way, Crawley, West Sussex. RH10 9RA United Kingdom.
Tel: +44 (0) 1293 456222 Fax: +44 (0) 1293 456235 Email: sales@powerlase-photonics.com