redPOWER® qube

SPI Lasers

Power and control for cutting, welding, micro-machining and additive manufacturing.
CW / Modulated Fiber Laser.

Key benefits and features

This versatile Fiber Laser range, covering 300W to 1.5kW offers a number of industry leading features in a standard 19” rack format, with integrated power supply making it simple to install into new or existing products.

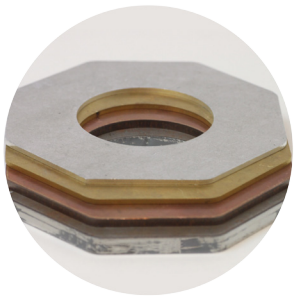
Full feature list

- 300W to 1.5kW CW output power.
- Single mode and multi mode fiber beam delivery options.
- Patented back reflection protection.
- FiberView™ software.
- Integral rapid modulation & pulse shaping.
- Small footprint.
- High reliability.
- Low maintenance.

Optimised for...

Easy integration into our customers’ equipment; these industrial Lasers come complete with their own internal control system.

These versatile Lasers offer a number of benefits including output power flexibility and a range of beam delivery, control and interface options.



Cutting
Aluminium, Mild Steel, Brass, Copper & Stainless Steel

Flat Sheet Cutting
Stainless Steel

3D Printing / Additive Manufacturing
Metal Powders

Benefits

- Back reflection protection
- Lower energy bills
- High reliability
- Small footprint
- 19” Rack mount format
- Low maintenance

Key features

- 300W, 500W, 750W, 1kW & 1.5kW
- BPP of 0.38 - 4.5mm.mrad
- Single mode and multimode fiber delivery options
- Up to 70kHz Modulation rate
- 1080nm Wavelength

Applications

- Cutting
- Welding
- Fine Cutting
- Additive Manufacturing
- Cladding

Industries

- Additive Manufacturing
- Automotive
- Electronics
- General Assembly
- Industrial

Go to spilasers.com for information on our full suite of Pulsed and CW Fiber Lasers.

www.spilasers.com | sales@spilasers.com

SM-S00472-3

Product Selection Parameters

Model	300W	500W	750W	1kW	1.5kW
Performance Data					
Operating Modes	CW and Modulated				
Output Power Range	10 – 105%				
Long Term Output Power Stability(1)	± 2% peak				
Wavelength (nm)	1080				
Linewidth (nm)	<10				
Polarisation	Un-polarised				
Min. Rise / Fall Time (µs)	<5 / <6				
Max. Modulation Frequency (kHz)	50				
Fiber Optic Beam Delivery					
20µm Fiber	0.38mm mrad M²: 1.1				
50µm Fiber	2.1mm mrad BPP(2)				
100µm Fiber	Enhanced 3.3mm mrad BPP(2)				
100µm Fiber	4.5mm mrad BPP(2)				
Alignment Laser Wavelength (nm)	630-680 (Class 2)				
Electrical					
Voltage (nominal)	100-240V	200-240V			
Current (A)	5-12	8-20	12-30	16-40	24-30
Environment / Cooling					
Ambient Temperature (ºC)	5-45				
Coolant Flow Rate (litre/min)(3)	3	5	8	10	15
Coolant Connections	12mm				
Humidity	5-85% RH, 35OC Max. Dew Point				
Module Dimensions					
Height	4U (178mm)				
Width	19” rack mount (445mm)				
Depth	681mm				832mm

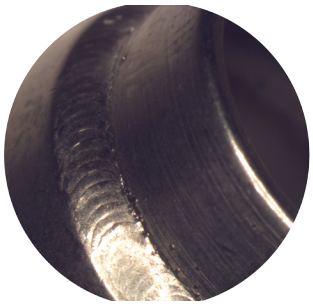
Notes
1. Constant Temperature
2. Beam Parameter Product = beam radius x half angle divergance
3. At Maximum 30ºC Temperature

Terms and conditions
Some specific combinations of product specifications and optional accessory may not be available. These Lasers are designed as units for incorporation or integration into other equipment. All product information is believed to be accurate and subject to change without notice. A complete product specification will be issued on request and also at time of order acknowledgement. The user assumes all risks and liability whatsoever in connection with the use of the product or its application.

Applications

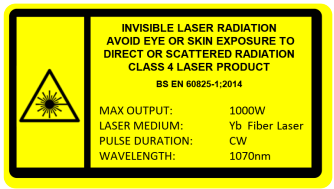
3D Printing / Additive Manufacturing
Metal Powders

Cutting
Aluminium, Mild Steel, Copper, Brass & Stainless Steel



Welding
304 Stainless Steel

Cutting
Mild Steel



www.spilasers.com | sales@spilasers.com