



redPOWER QUBE

300W - 2kW

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 2kW 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.

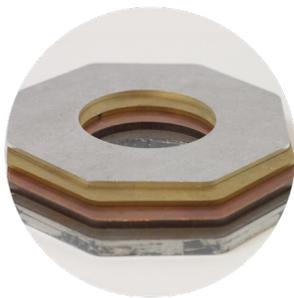
Full feature list

- 300W to 2kW CW output power.
- Single mode and multi mode fiber beam delivery options.
- Patented back reflection protection.
- FiberView™ software.
- Integral rapid modulation & pulse shaping.
- High reliability.
- Low maintenance.

Optimised for...

Easy integration into our customers equipment; 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

- PIPA-Q fiber termination with industry standard opto-mechanical compatibility
- Integral patented back reflection protection
- Lower energy bills
- High reliability
- 19" Rack mount format
- Low maintenance

Key features

- Single mode and multimode fiber delivery options
- Up to 50kHz Modulation rate

Applications

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

Industries

- Automotive
- Electronics
- General Assembly
- Industrial

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SM-S00472-8

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

Product Selection Parameters

Model	300W	500W	750W	1kW	1.5kW	2kW
Performance Data						
Operating Modes	CW and Modulated					
Output Power Range	10 – 105%					
Long Term Output Power Stability ⁽¹⁾	± 2% peak					
Wavelength (nm)	1075-1080					
Linewidth (nm)	<10					
Polarisation	Un-polarised					
Min. Rise / Fall Time (µs)	<5 / <6					
Max. Modulation Frequency (kHz)	40					50

Fiber Optic Beam Delivery

Single Mode Fiber	M ² 1.1 ± 0.1					M ² 1.1(typ), 1.3(max)
50µm Fiber	2.1mm mrad BPP ⁽²⁾					
100µm Fiber	Enhanced 3.3mm mrad BPP ⁽²⁾					
100µm Fiber	4.5mm mrad BPP ⁽²⁾					
300µm Fiber	13mm.mrad BPP ⁽²⁾					
Alignment Laser Wavelength (nm)	630-680 (Class 2)					

Electrical

Voltage (nominal)	100-240V	200-240V				380-480V (3ph)
Maximum Current Range (A)	7-16	10-13	17-20	19-23	29-32	12-16

Environment / Cooling

Coolant Temperature (°C)	18-30					18-25
Coolant Flow Rate (litre/min) ⁽³⁾	5	7	10	12	17	28
Coolant Connections	12mm					16mm
Humidity	5-85% RH, 35°C Max. Dew Point					

Module Dimensions

Height	3U (134mm) or 4U (178mm) options	4U (178mm)			6U (270mm)	
Width	19" rack mount (445mm)					
Depth	681mm			832mm		

Notes

1. Constant Temperature
2. Beam Parameter Product = beam radius x half angle divergance
3. At 25°C Water 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

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