redPOWER® 1kW

Power and control for cutting, welding, micro-machining and additive manufacturing

CW/ Modulated Fiber Laser

Key benefits and features

This versatile 1kW Laser 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.

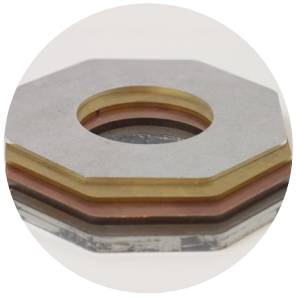
Full Feature list

- 1kW 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

Cutting
Mild Steel

Benefits

- Back Reflection Protection
- Lower Energy Bills
- High Reliability
- Small Footprint
- 19” Rack Mount Format
- Low Maintenance

Key Features

- 1000W
- M^2 ≤1.3, 6, 8
- 50kHz Modulation Rate
- 1070 ± 10nm Wavelength
- Divergent Output

Applications

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

Industries

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

Go to spilasers.com/products for information on accessories, extended warranties and longer beam delivery optic lengths.

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www.spilasers.com/support

SM-S00461-2

Product selection parameters

Model	1000W Fiber Laser		
Performance Data			
Average Output Power (W)	1000W		
Operating Modes	CW and Modulated		
Output Power Range	10 – 100%		
Long Term Output power stability	+/-2% peak to peak		
Wavelength (nm)	1070 standard		
Linewidth (nm)	<2		
Polarisation	Un-Polarised		
Modulation Capability	Unlimited Pulse Shaping, Ramping & Process Cycles		
Min. Rise / Fall Time (µs)	10		
Max. Modulation Frequency (kHz)	50		
Fiber Optic Beam Delivery			
Output Fiber Type	Single Mode	50µm	100µm
Beam Quality/BPP (mm.mrad)(1)	0.44 (M^2<1.3)	2	3
Electrical			
Electrical Supply (V ac/ Hz)	200 – 240 / 47 - 63		
Power consumption (W)	3500		
Environment / Cooling			
Water Temperature (ºC) (2)	20		
Coolant requirement (litre/min)	8		
Coolant Connections	10mm hose		
Max. Relative Humidity (2)	85% (20º), 50% (40ºC)		
Mass (kg)	50		
Interface			
Standard Interfaces	Serial - RS232, Ethernet Parallel - Machine Interface		

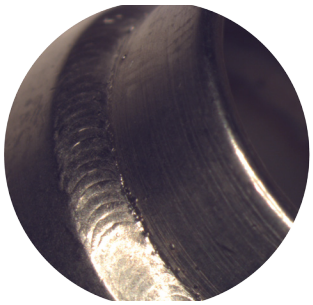
Notes
1. Beam Parameter Product = beam radius x half angle divergence
2. Non-condensing

Terms and conditions
Some specific combinations of product specifications and optional accessory may not be available. These Lasers are designed as products 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

Cutting
Mild Steel

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