



redPOWER QUBE

100W - 200W

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

CW / Modulated Fiber Laser.



Key benefits and features

This versatile air cooled Fiber Laser module, covering 100-200W 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 system.

Full feature list

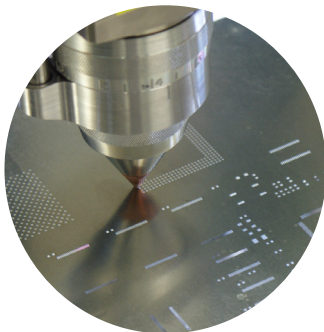
- 100-200 CW output power
- Fully air cooled laser and beam delivery fiber
- Single mode and multi mode fiber beam delivery options
- Patented back reflection protection
- FiberView™ software
- Integral rapid modulation & pulse shaping
- Small footprint
- High reliability
- Low maintenance

Optimised for...

Easy integration into our customers' equipment where the added complexity of providing water cooling is undesirable.

The single mode laser models are available with QCS collimated output delivery fibers for ease of integration. The multimode laser models are available with air cooled PIPA-Q fiber delivery.

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



Micro Cutting
Stainless Steel



3D Printing / Additive Manufacturing
Metal Powders



Stent Cutting
Stainless Steel

Benefits

- QCS compatible fiber termination for single mode
- PIPA-Q air cooled fiber termination for multi mode with industry standard opto-mechanical compatibility and integral patented back reflection protection
- Lower energy bills
- High reliability
- 19" Rack mount format
- Low maintenance

Key features

- 100W, 200W
- Single mode and multimode fiber delivery options
- Up to 50kHz Modulation rate

Applications

- Cutting
- Welding
- Fine Cutting
- Additive Manufacturing
- Ceramic Scribing

Industries

- Automotive
- Electronics
- Medical
- General Assembly
- Industrial

Model Selection Parameters

Model	100W	200W
Performance Data		
Operating Modes	CW and Modulated	
Output Power Range	10 – 100%	
Long Term Output Power Stability ⁽¹⁾	± 2% peak	
Wavelength (nm)	1070	
Linewidth (nm)	<10	
Polarisation	Un-polarised	
Min. Rise / Fall Time (µs)	<5 / <10	
Max. Modulation Frequency (kHz)	50	
Fiber Optic Beam Delivery		
Single Mode Fiber (QCS)	5±0.7mm collimated beam diameter	
50µm Fiber (AC PIPA-Q)	2.1mm mrad BPP ⁽²⁾	
100µm Fiber (AC PIPA-Q)	Enhanced 3.3mm mrad BPP ⁽²⁾	
100µm Fiber (AC PIPA-Q)	4.5mm mrad BPP ⁽²⁾	
300µm Fiber (AC PIPA-Q)	13mm.mrad BPP ⁽²⁾	
Alignment Laser Wavelength (nm)	630-680 (Class 2)	
Electrical		
Voltage (nominal)	200-240V	
Maximum Current Range (A)	6	
Connector Type	Harting Han Q 2/0 connector	
Environment / Cooling		
Ambient Temperature (°C)	5-40	
Humidity	5-85% RH, 35°C Max. Dew Point	
Module Dimensions		
Height	4U (178mm)	
Width	19" rack mount (445mm)	
Depth	502mm	

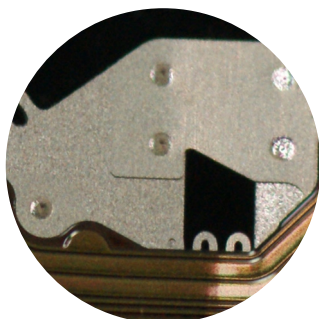
Notes

1. Constant Temperature
2. Beam Parameter Product = beam radius x half angle divergence

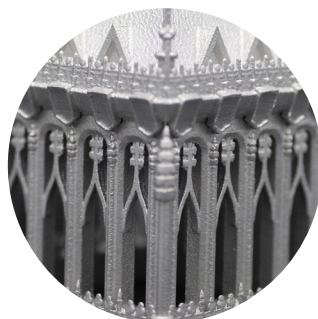
Terms and conditions

Some specific combinations of module specifications and optional accessory may not be available. These Lasers are designed as units for incorporation or integration into other equipment. All module information is believed to be accurate and subject to change without notice. A complete module 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 module or its application.

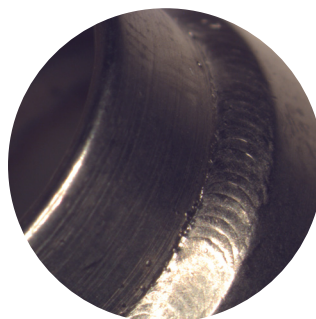
Applications



Welding
Micro Spot



3D Printing / Additive Manufacturing
Metal Powders



Welding
304 Stainless Steel



Fine Cutting
Stainless Steel

www.spilasers.com | sales@spilasers.com

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SM-S01019-A

