

## 2 $\mu\text{m}$ THULIUM FIBER LASER AIR COOLED

1200W Peak Power and  
120 W Continuous Power



The new air-cooled Fiber Laser module is based on a thulium-doped fundamental mode fiber oscillator with wavelength stabilization by fiber Bragg gratings (FBG). The laser module can be operated in pulsed and continuous wave mode. This laser has been specifically engineered for medical applications.

### Medical Applications:

- Laser lithotripsy (Ureteral, Bladder and Kidney Stones Treatment)
- General Surgery (Soft Tissue Cutting)
- Fibercoupling in to 150  $\mu\text{m}$  application fiber at full power

### Features:

- Fully adjustable pulse parameters
- Various pulse shapes, including burst mode
- Coupling box compatible with a wide range of application fibers
- Single-mode beam quality allows coupling into small-core fibers

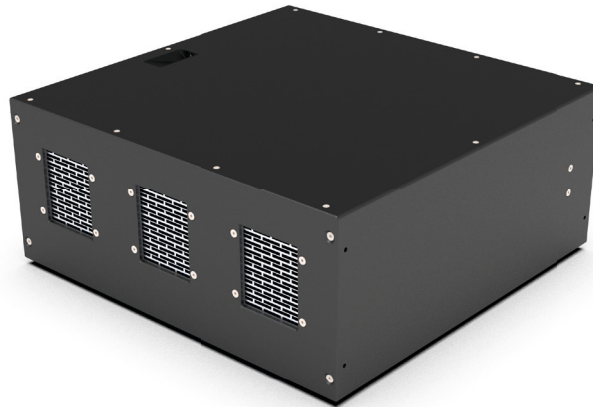


Design study



For medical applications

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### AIR-COOLED LASER MODULE

<b>Optical Specifications</b>	
Average Power	120 W (CW, Pulsed)
Peak Power	1200 W
Pulse Energy	10 J @ 1200 W
Pulse Length	0.03 - 50 ms
Pulse Repetition Rate	1 – 3000 Hz
Duty Cycle	10 %
Central Wavelength	1940 $\pm$ 20 nm
Linewidth (FWHM)	< 0.4 nm
Beam Quality	M <sup>2</sup> < 1.2 (Single-mode)
Mode of Operation	CW, Pulsed
Laser Class	4
Fiber Connector	Futonics Standard
NA	0.1
<b>General Specifications</b>	
Dimensions <sup>1</sup>	422 x 176 x 410 mm
DC Input 1	24 V, 4 A
DC Input 2	CW: 60 V, 10 A / QCW 60 V 80 A
Efficiency (electrical to optical)	> 25 %
Interface	USB, D-Sub 25
<b>Cooling</b>	
Cooling	3 Fans
Air Rate	10 Cubic Meters / Minute
Cooling Air Temperature <sup>2</sup>	16 – 24° C
Noise	65 db

<sup>1</sup> Width x Height x Depth <sup>2</sup> Not condensing

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