Member of O-Net Group

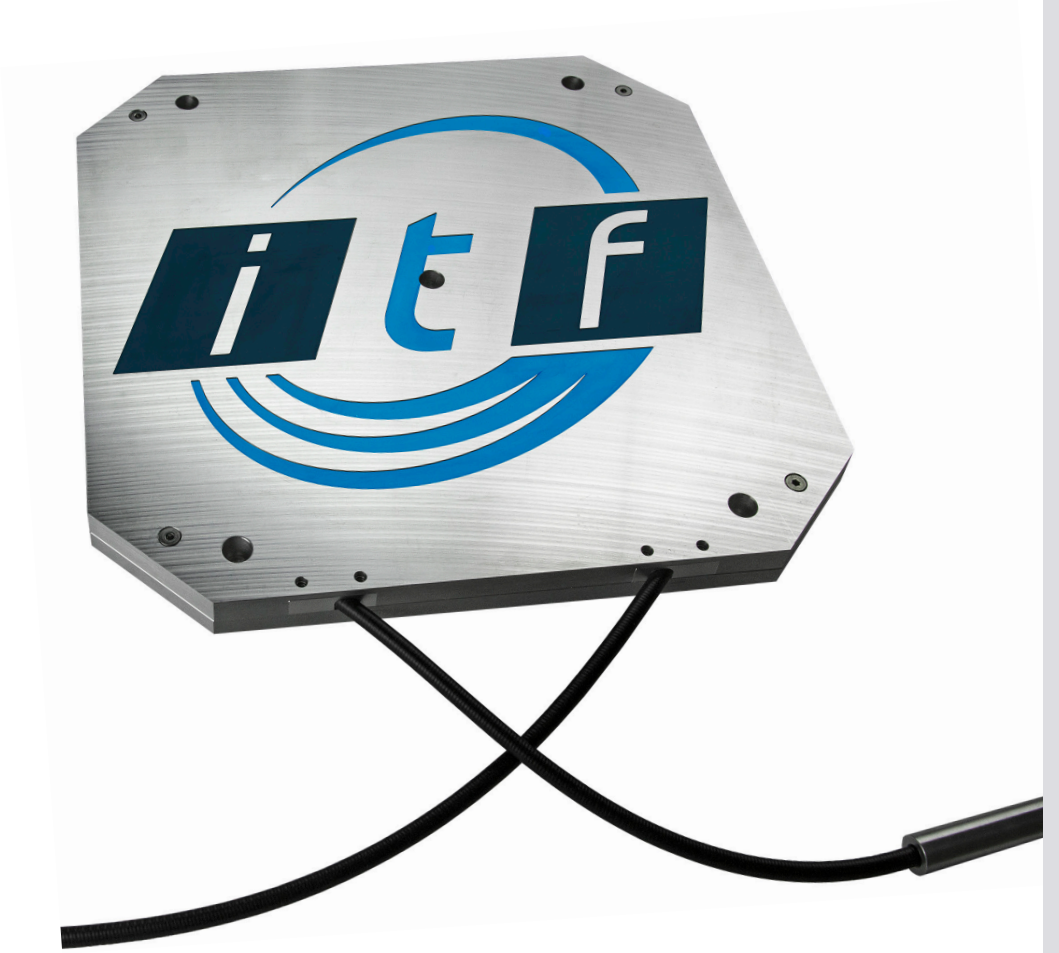
It's In The Fiber!

Powering Industrial Lasers Forward
Laser Engines

Integrated Optical Cavity Solutions - Up to 5 kW

ITF Technologies' Laser Engines are built and designed based on our long time expertise in Large Mode Area fiber handling and component manufacturing. They feature exceptional pump to laser efficiency and beam quality. With the proper pump configuration, they will deliver maximum laser power using the minimum number of pump diodes.

The use of ITF Laser Engines allows our customers to take advantage of optimal optical performance while being able to concentrate their efforts on other parts of their laser system. They are therefore able to optimize their system design to best answer the market and their own needs.



KEY FEATURES

- High Pump Conversion Efficiency
- Custom Configurations Available
- Single module up to 5kW
- Power and temperature monitoring

APPLICATIONS

- Industrial Fiber Lasers
- Fiber Laser Combination
- kW Class Fiber Lasers
- Industrial & Research
- Additive manufacturing
- Metal sheet cutting
- Laser welding

FOR MORE INFO

Website: www.itftechnologies.com
Email: info@itftechnologies.com

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Laser Engines - 1 kW & 2 kW

Optical specifications

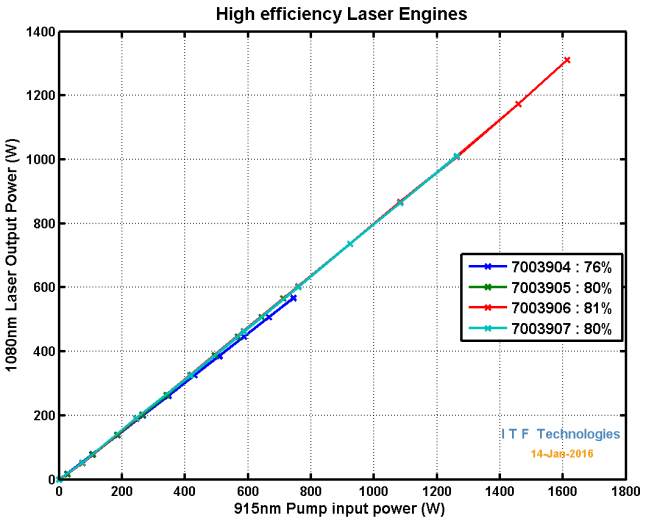
	1 KW CLASS	2 KW CLASS
Center wavelength	1080nm +/- 5nm	1080nm +/- 5nm
Optical-Optical Efficiency	>73% (typical >75%)	>73%
Polarization	Random	Random
M2	< 1.2	< 1.5
Laser line width	> 1nm	> 1nm
Power variation over one hour	less than +/-1% (after warmup)	less than +/-1% (after warmup)
Output Power	1000 W	2000 W

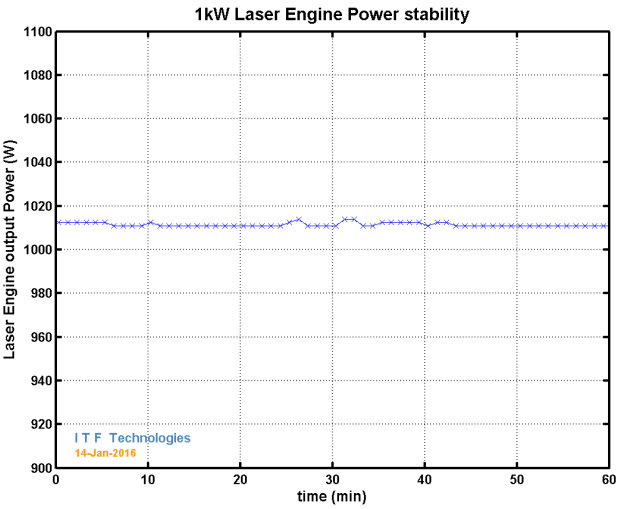
Pump requirements

	VALUE	NOTES
Number of pump input ports	6 to 24	Depending on customer's pump diode choice
Pump fiber	106.5/125um, 135/155um or 200/220 um NA=0.22	Other fibers also available for custom projects
Pump wavelength	915 nm	>95% of energy inside 908-928nm over full operation range

Mechanical and environmental specifications

	VALUE	NOTES
Dimensions	375mm x 375mm x 30.5mm	Same dimensions on all power classes
Operating temperature	15C to 25C	Base plate temperature, non condensing
Storage temperature	-40 to 75°C / <80% relative humidity	Non condensing
Delivery fiber	20/400um (1kW) or 25/400um (2kW)	50um and 100um core outputs also available
Delivery cable	Optional QBH optical cable available	Variable length





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Last revised: January 2023

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Laser Engines - Sub kW

Optical specifications

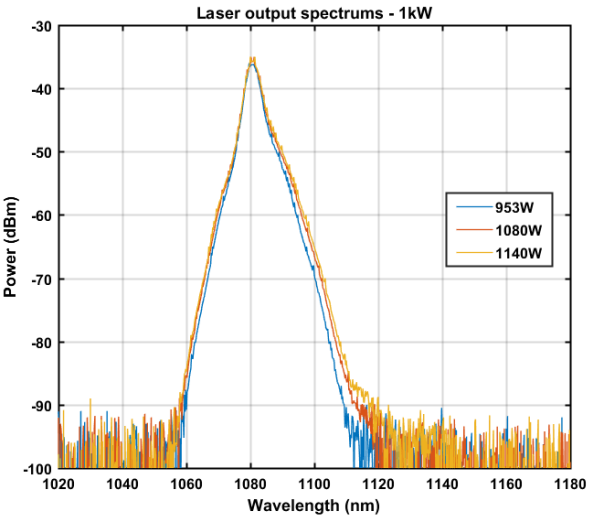
	SUB-KW CLASS
Center wavelength	1080nm +/- 5nm
Optical-Optical Efficiency	>68% (typical >70%)
Polarization	Random
M2	1.05 typical
Laser line width	> 1nm
Power variation over one hour	less than +/-1% (after warmup)
Output Power	Up to 1 kW

Pump requirements

	VALUE	NOTES
Number of pump input ports	6 to 12	Depending on customer's pump diode choice
Pump fiber	106.5/125um, 135/155um or 200/220 um NA=0.22	-
Pump wavelength	915 nm	>95% of energy inside 908-928nm over full operation range

Mechanical and environmental specifications

	VALUE	NOTES
Dimensions	300mm x 350mm x 21mm	Same dimensions on all power classes
Operating temperature	15C to 25C	Base plate temperature, non condensing
Storage temperature	-40 to 75°C / <80% relative humidity	Non condensing
Delivery fiber	14/250 um	-
Delivery cable	Optional QBH optical cable available	Variable length



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