

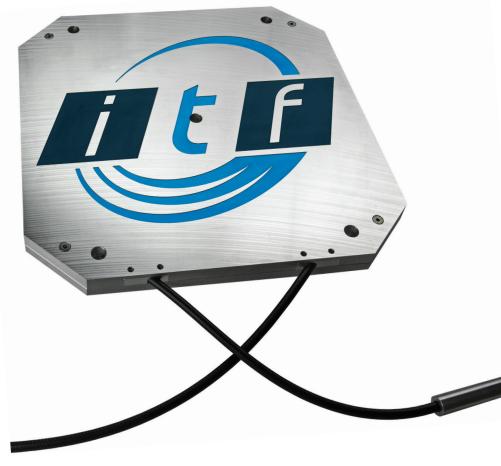


Powering Laser Engines Forward Laser Engines

Integrated Solution for Fiber Lasers up to 2kW

ITF Technologies' Laser Engines are build and designed based on our long time expertise in Large Mode Area fiber handling and component manufacturing. They feature exeptional pump to laser light efficiency and preserve an excellent beam quality. With the proper pump configuration, ITF Technologies Laser Engines will deliver the maximum laser power by using the minimum amount of pump diodes.

Our Laser Engines allows our customers to take advantage of optimum optical performance and concentrate their efforts to build a laser system based on their own integration expertise. They are then able to optimize their design to best answer their own customer requirements.



KEY FEATURES

High Pump Power Efficiency

Custom Configurations Available

High Optical Conversion Efficiency

ROHS Compliant

APPLICATIONS

Fiber Lasers

Fiber Laser Combination

kW Class Fiber Lasers

Industrial & Research

FOR MORE INFO

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Laser Engines

POWERING LASER ENGINES FORWARD

Laser specifications (1 kW class)

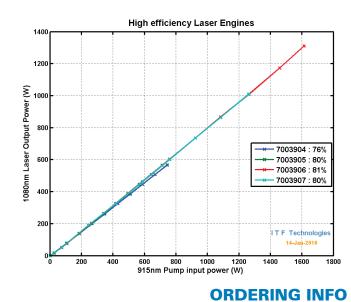
| | 1 KW CLASS | 2 KW CLASS |
|-------------------------------|--------------------------------|-----------------------------------|
| Center wavelength | 1080nm +/- 5nm | 1080nm +/- 5nm |
| Optical efficiency | >73% (typical >75%) | >73% |
| Polarization | Random | Random |
| M2 | < 1.2 | < 1.5 |
| Laser line width | > 1nm | > 1nm |
| Power variation over one hour | less than +/-1% (after warmup) | less than $+/-1\%$ (after warmup) |
| Output Power | 500W or 1000W | 2000 W |

Pump requirements

| | VALUE | NOTES |
|----------------------------|---------------------|---|
| Number of pump input ports | 6 to 24 | Dependant on customer's pump diode choice |
| Pump fiber | 106.5/125um NA=0.22 | 135/155um fibers also available |
| Pump wavelength | 915nm | |

Mechanical and environmental specifications

| • | | |
|-----------------------|---|---|
| | VALUE | NOTES |
| Dimensions | 300mm x 300mm x 25mm | All power classes have the same footprint |
| 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 or 25/400 | 50um and 100um core output also available |
| Delivery cable | Armored, up to 5 meters | QBH optical cable available |



1kW Laser Engine Power stability 1100 1080 1060 ŝ 1040 Laser Engine output Power 1020 1000 980 960 941 920 ITF Technologies 900 10 20 40 50 60 time (min)

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