

High Power Portable Bench Top Fiber Delivering Laser System



The BWF2 Series is a compact turnkey fiber-coupled laser system providing up to 30 Watt of continuous power. Combined with a high brightness fiber-coupled laser diode, thermoelectric cooler, power supply and control electronics the BWF2 comes in one complete package. The system operates from standard wall plug line power. The unique design of BWF2 includes features as visible (red or green) aiming beam, multifunctional relay controller for versatile laser operations, and a remote port for external modulation and control purpose. Optional features include

lens assemblies that can be attached to the end of fiber with an SMA 905 connector. By use of the lens projection assembly spots as small as 0.3mm in diameter can be achieved at designed distance providing the user with an intense, non-contact heat source. In addition, optional control interfaces via TTL or analog ports are available for laser and aiming power.

Highlights

- Power delivered by high-brightness fiber
- Stand-alone self-contained system
- Compact, TEC with forced air cooling
- 635-2000 nm wavelengths available
- Conversion into OEM system for qualified OEM customer

Typical Applications

Industrial

- Selective soldering/de-soldering
- Heat treating
- Quick curing of epoxy
- Transformation hardening
- Plastic welding

Medical Research

- Contact cutting, ablation
- Coagulation necrosis
- Tissue welding/fusion
- Laser hyperthermia photodynamic studies

BWF-2

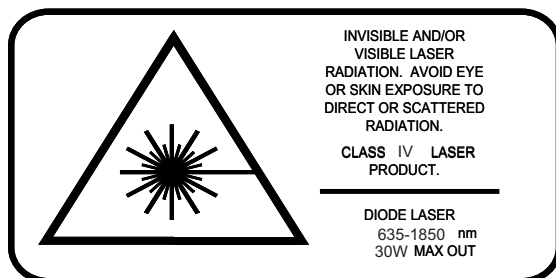
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Typical Specifications

Optical	
Power Output ¹	Up to 30W
Peak Wavelength Range	635-1850nm
Bandwidth (FWHM)	1-3nm @ <1000nm and 10-15nm @ 1000-1850nm
Output Port	SMA 905
Beam Divergence	0.12-0.4 NA Nominal
Fiber Requirement	50-1000 μ m core
Aiming Beam (optional)	650+/-10nm @ >1mW (or 532nm @ >1mW)
Electronic	
Input Power	3 - 10A @ 110 VAC, typical
Control	Front panel current control and display 0-max Front panel digital timer (6 operating modes, 10 ms – 9999hrs) (optional) TTL or Analog ports for laser output and aiming beam (optional)
Mechanical	
Physical Dimensions	250mm (w) x 120mm (h) x 320mm (d)
Cooling	Thermal electric cooler with internal fan
Weight	5-8 lbs
Environmental	
Ambient Temperature	5-30°C
Humidity	5-95%, non-condensing
Accessory (optional)	Collimator readily threaded onto SMA 905 connector (Beam diameter 6.2mm @ 1/e ² , f=11.0mm @ NA=0.25)

1. For clean, defect-free fiber and full rated output at SMA receptacle.

Available options: Visible aiming light, fiber (various diameters, numerical apertures and lengths) and lens cell attachments



DISCLAIMER:

This product complies with the requirements with Federal Regulations CDRH 21 CFR 1040.10. This laser is intended for scientific and industrial applications only and is not for use as a medical device.



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