

BIOLASE WATERLASE SPECIFICATIONS



User Manual

BIOLASE®

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Dimensions (W x L x H)

- Unit 12.5 x 26 x 32 in (32 x 66 x 81 cm)
- With Fiber 12.5 x 26 x 40 in (32 x 66 x 102 cm)
- Weight 88 lbs (40 kg)

Electrical

- Operating Voltage: 115 VAC \pm 10% (230 VAC \pm 10% international)
- Frequency: 50/60 Hz
- Current rating: 16.0 A (8 A international)
- External fuses: None
- Main control: Circuit breaker
- On / Off control: Keyswitch
- Remote interruption: Remote interlock connector

Waterlase

- Water type: Distilled or Sterile
- External air source: 80 - 120 psi. (5.5 - 8.2 bar)
- Droplet size: 5 - 200 μ m
- Max. droplet velocity: 100 m/s
- Interaction zone: 0.5 - 3.0 μ m from handpiece tip

Optical

- Laser classification: IV
- Medium: Er, Cr:YSGG
Erbium, Chromium, Yttrium, Scandium, Gallium,
Garnet
- Wavelength: 2.78 μ m (2780 nm)
- Frequency: 20 Hz
- Average power: 0.0 - 6.0 W
- Power accuracy: \pm 20%
- Pulse energy: 0 - 300 mJ
- Pulse duration: 140 - 150 μ s
- Delivery head angles: 0° (Straight) and 90° (Standard)
- Delivery tip diameter: 200 – 1200 μ m
- Divergence: 8°
- Mode: Multimode
- Aiming Beam: Red 655 nm laser (safety classification I)
- Nominal Ocular
Hazard Distance: (NOHD) 5CM

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Handpiece

The handpiece rotates and is detachable from the optical shaft. It delivers optical energy and atomized spray to the treatment area.

Optical Tip

The tip is detachable from the handpiece and serves as the optical power conduit to the tissue target.

Fiber Optic Cable

The fiber optic cable contains the optical fiber together with the air and water tubing. Laser radiation is delivered from laser unit to the handpiece through the optical fiber.

Delivery System Connections on the Unit

Please refer to Delivery System User Manual for specific connections instructions.

Handpiece Collar

The handpiece collar secures the handpiece to the fiberoptic cable.

Quick Release Mechanism/Tabs

To disconnect the handpiece or protective cover, squeeze on the two opposite dots with one hand, and with the other, twist the handpiece or protective cover off the shaft.

Optical Shaft

The optical shaft contains the fiberoptic cable and tip coupling mechanism.

Tip Plug (for tip)

The tip plug protects the handpiece optical components from damage due to water, steam or debris that could enter through the handpiece fiber tip orifice when tip is not in use.

Protective Rubber Cap (for fiber optic connector)

The protective rubber cap protects the input end of the fiber optic cable when not attached to unit.