

ACE FIBER LASERS

Ultimate Fiber Laser Series for Urology Applications

The ACE FL series from Coherent establishes a new benchmark for therapeutic Thulium fiber laser technology, delivering a virtuoso performance for demanding applications such as lithotripsy and soft tissue procedures.

Engineered with our own proprietary fiber laser components and an advanced optical design, which means ACE FL enables medical OEMs to equip their products with both superb precision for stone dusting and superior control in tissue ablation. The compact architecture allows for easy integration into a wide range of surgical systems. Designed from the outset with the operating theater in mind, the ACE FL brings air-cooled operation to a new ultra-low noise level, ensuring unobtrusive operation for the most comfortable environment benefiting both surgeons and patients alike.



FEATURES

- Up to 1.25 kW in peak power, optimal for stone dusting
- Up to 250 W continuous power, ideal for soft tissue removal
- Low acoustic noise
- Compact and configurable, ideal for OEM integration

APPLICATIONS

- Lithotripsy
- Benign Prostatic Hyperplasia (BPH)

| Specifications | ACE FL75:650 | ACE FL120:1250 | ACE FL250:1250 |
|-------------------------------------|---------------------------|----------------|--------------------------|
| Nominal Average Power (W) | 75 | 120 | 250 |
| Nominal Peak Power (W) | 650 | 1250 | |
| Wavelength (nm) | 1940 ±10 | | |
| Operation Mode | CW/QCW | | |
| Pulse Frequency (Hz) | 1 to 2500 | | |
| Pulse Width | 50 μs to 20 ms | | |
| Pulse Energy (J) | 0.025 to 7.5 | | |
| Acoustic Noise | <60 dBA | | N.A. |
| Electrical Ratings | | | |
| Supply Voltage (VDC) | <75 | | |
| Cooling | | | |
| Medium | Air-cooled | | Water (deionized or tap) |
| Water Cooling Temperature (°C) | N.A. | | 20 ±2 |
| Recommended Cooling Capacity (kW) | N.A. | | 1.5 |
| Water Flow (l/min.) | N.A. | | >5 |
| Beam Delivery | | | |
| Delivery Fiber Core & NA | 25 μm fiber core, <0.1 NA | | |
| Delivery Fiber Connector and Length | SMA905 connector, 1.5 m | | |
| Dimensions and Weight | | | |
| Dimensions (L x W x H) (mm) | 390 x 365 x 215 | | 640 x 400 x 110 |
| Weight (kg) | <20 | <25 | <27 |
| Environmental Conditions | | | |
| Ambient Temperature (°C) | 15 → 35 | | |
| Humidity | 35 → 90%, non-condensing | | |