



# LX 16 Plus

## Three-Wavelengths Laser

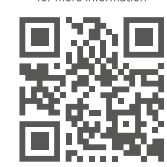


Diode Laser

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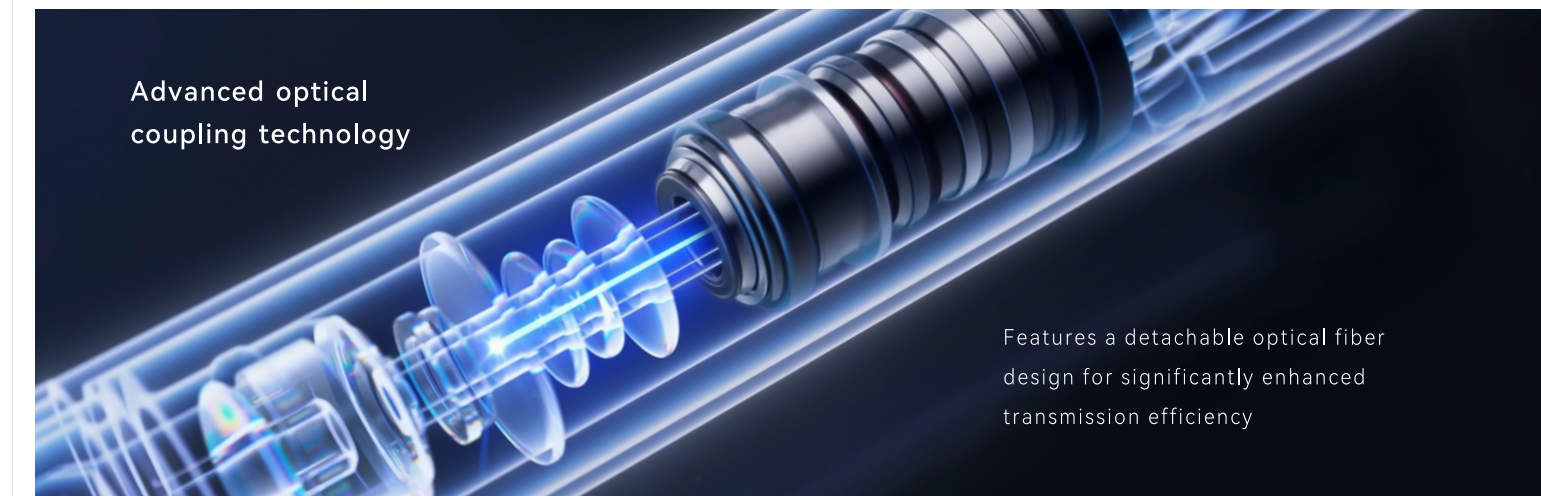


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### Comprehensive multi-mode system

40 preset modes + 14 custom modes + 14 favorite modes  
 Designed for versatility and ease



Advanced optical coupling technology

Features a detachable optical fiber design for significantly enhanced transmission efficiency



Japanese chip  
 German optical components

Intelligent control algorithm

Ensures stable laser output and extended lifespan

Utilizes PID algorithm for closed-loop control

Guarantees accurate laser power regulation for precise and minimally invasive treatments



High-frequency pulse control for ideal cutting

Pulse frequency up to 20,000 Hz

High power and ultra-short pulse width enable fast and precise cutting, minimizing thermal damage and carbonization for faster healing.



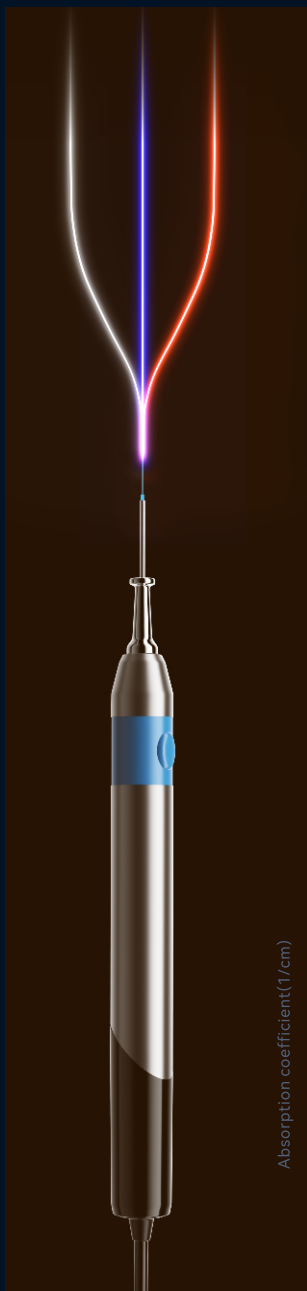
Integrated cooling system

Effectively regulates laser working temperature

Brings stable power output and prolonged device lifespan

### 3 wavelengths, more clinical possibilities

976nm 650nm 450nm



#### 450 nm blue laser

- Ideal for: soft tissue cutting, ablation, coagulation, incision/excision
- Superior cutting precision with minimal thermal damage and enhanced visibility during procedures

#### 650 nm LLLT laser

- Ideal for: Low-Level Laser Therapy (LLLT), widely known as Photobiomodulation (PBM)
- Stimulates cellular repair, accelerates wound healing, reduces inflammation, and promotes tissue regeneration
- Enhances patient comfort and accelerates recovery after dental surgeries, improving overall clinical outcomes

#### 976 nm infrared laser

- Ideal for: deep tissue penetration, bacterial reduction in periodontal and endodontic treatments
- Also suitable for pain management and treatment of temporomandibular joint (TMJ) disorders, providing comprehensive therapeutic solutions

#### Absorption curve of biological tissues at different laser wavelengths

As illustrated in the chart, proteins, hemoglobin, and melanin exhibit significantly higher absorption coefficients for the 450 nm blue laser compared to traditional near-infrared wavelengths (810 nm, 940 nm, 976 nm, 980 nm, and 1064 nm). Specifically, the absorption coefficient of proteins for the 450 nm blue laser is approximately 1,000 times greater, hemoglobin's absorption is about 100 times higher, and melanin's absorption increases by roughly 3 times relative to those near-infrared wavelengths.

This enhanced absorption allows the 450 nm blue laser to achieve optimal cutting efficiency at much lower power levels, typically ranging from 0.5 W to 2 W, resulting in higher cutting precision and minimal thermal damage.

In addition, the 450 nm blue laser operates in the visible spectrum, enabling clear visual control during procedures. It supports non-contact cutting, and the fiber tip requires no activation prior to use, ensuring low optical loss and consistent performance.

#### Dual control for effortless operation

Laser control via handpiece button or wireless foot pedal

Allows flexible and easy switching between control modes



#### Large color touchscreen

Fast response and highly sensitive touch control achieves seamless interaction experience.



#### Comprehensive protection for safe use

Laser protective goggles designed for three wavelengths, protecting doctors, assistants, and patients



#### Convenient sterilization for peace of mind

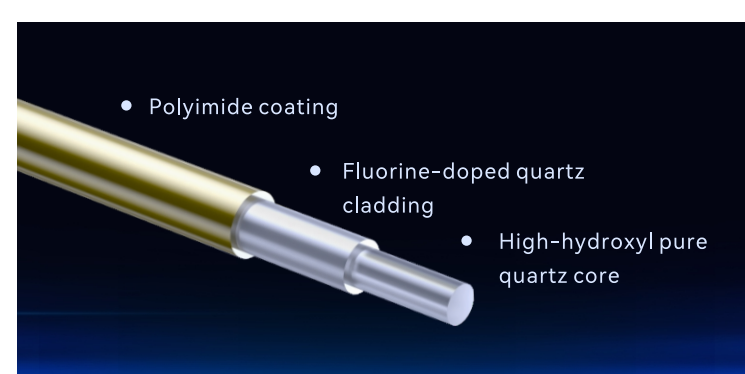
Autoclavable metal fiber tips & aluminum alloy handpiece sleeve

Minimizes the risk of cross-infection

#### Premium materials for superior experience

High-hydroxyl pure quartz core with fluorine-doped quartz cladding for higher transmission efficiency

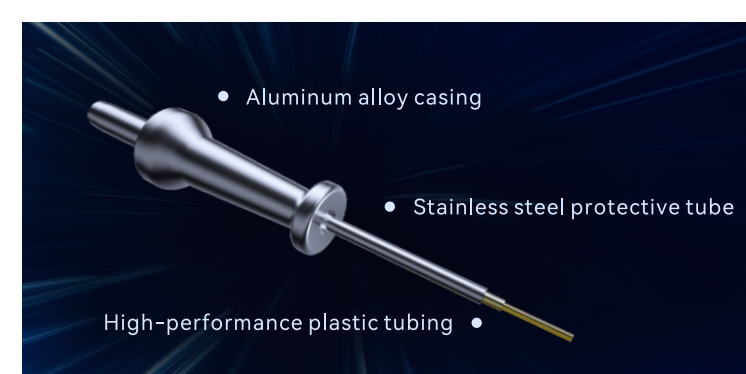
Outer polyimide coating for high-temperature resistance, excellent biocompatibility, and enhanced fiber durability, reducing breakage risks



#### Triple protection for reusability

Triple protection with aluminum alloy casing, stainless steel protective tube, and high-performance plastic tubing

Can be autoclaved for repeated use



#### Wavelengths & optical power

450±20 nm: Pmax = 4W  
 650±20 nm: Pmax = 200mW  
 976±20 nm: Pmax = 7W

#### Laser system

450 nm: Class IV  
 976 nm: Class IV  
 650 nm: Class II  
 (according to IEC 60825-1)

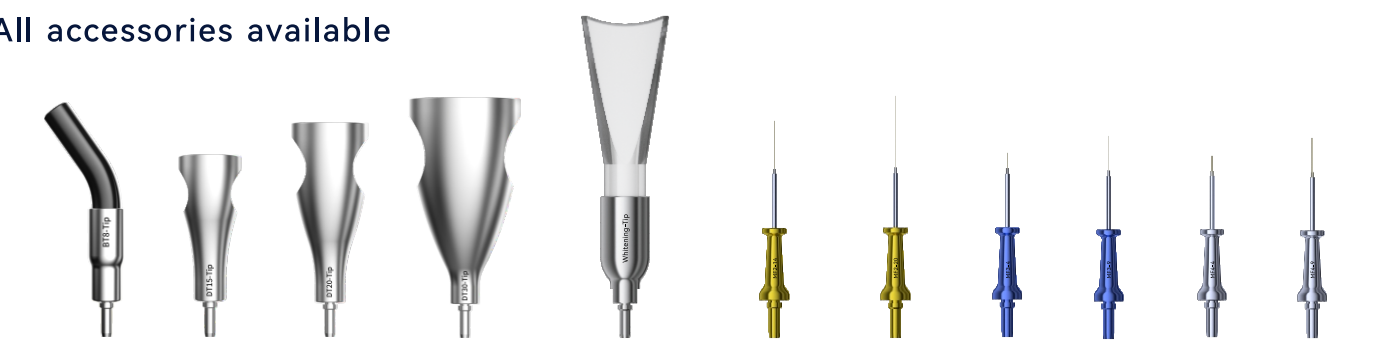
#### Emission modes

CW: Continuous Wave  
 QCW: Pulse Wave, Frequency range 1 Hz to 20 kHz

#### Aiming beam Battery

650±20 nm / Pmax < 5mW 11.1V/2600mAh × 2 (57.7Wh)

#### All accessories available



BT8-Tip DT15-Tip DT20-Tip DT30-Tip Whitening-Tip MF2-14 MF2-20 MF3-4 MF3-9 MF4-4 MF4-9