



# Holmium Urology Laser

**DMLMU2100PH40X**

## DESCRIPTION

Holmium laser is a solid-state and pulsed laser, usually abbreviated as ho:YAG laser. This laser emits light at a wavelength of 2.1 um, and can transmit through optical fibers which makes holmium laser highly suitable for endoscopic surgery in many clinical specialties, and currently mostly used are in urology for treatment of stones, BPH and tumors. In recent years, holmium laser treatment has spread out to many other specialties like Gastroenterology, Neurology, Pulmonology, Orthopedics, Hemorrhoid and etc. The holmium laser, with a wavelength of 2.1um, is highly absorbed by water and has a very shallow penetration depth of approximately 0.4 mm. As a pulsed laser, it reduces deeper thermal effects which are much more prevalent in continuous wave lasers. The shallow penetration depth minimizes the coagulation zone and collateral damage to sensitive surrounding tissue, so it can achieve clean and precise incision and tissue ablation. The controlled penetration depth together with the water absorption characteristics reduce the energy to non-targeted tissue. Hemostasis is achieved through modulating laser parameters and focal distance. Meanwhile, the thermal effect, created by laser energy that is absorbed by the water contained in the stones, as well as the stone composites, can be used to break stones of any size or composition, making holmium lasers the best choice for laser lithotripsy.

## ADVANTAGES

- Turning stones into very small particles suspended in water that can be easily and painlessly removed from the body.
- Effective for all urinary tract stones regardless of the dimensions and different types of stones.
- Minimal stone rejection during operation and without damage to surrounding tissues during stone destruction.
- Lithotripsy without bleeding and the best option for patients sensitive to bleeding.
- Can be used as a delicate surgical knife to cut body tissues and open narrow tract without bleeding or very minor bleeding.
- Ability to clot and stop bleeding during surgery.
- No need for general anesthesia in most cases.

## ACCESSORY

- Laser Fiber
- Cutter and Stripper
- Protective Glass

## THERAPEUTIC APPLICATIONS

- Urology
- Lithotripsy
- Treatment of urinary tract stenosis
- Correction, restoration and surgery of tissue

## SUPPORT FEATURES

- One-year warranty and full after-sales
- Product delivery with installation.
- Complete training with safety tips by expert trainers.
- Maintenance of all products in case of technical issues.
- Product guide with detail explanation.

## TECHNICAL DATA

|                         |                          |
|-------------------------|--------------------------|
| Laser type              | Pulsed Holmium Laser     |
| Wavelength              | 2100 nm                  |
| Cavity Power            | Up to 40W                |
| Energy per pulse        | 0.1-5.5 J/Pulse          |
| Pulse width             | 150-550 us FWHM          |
| Repetition rate         | 1-15 Hz                  |
| Aiming Beam             | 532nm, 5mW               |
| Beam Delivery           | Fiber 550 um             |
| Cooling System          | Chiller                  |
| Laser Activation        | Foot switch              |
| Electrical requirements | 220V AC/Single phase/16A |
| User Interface          | LCD Touch panel          |
| Dimension (WxDxH)       | 66cmx70cmx125cm          |
| Weight                  | 200kg                    |