



# **The Most Versatile Diode!** Surgery+ PBM+ PDT all in One!



- $\checkmark$ Flexi 18 Painless Endodontics
- Chitosan Nanoparticle IC Green Periodontics (Flap-less)  $\checkmark$
- From Oral Medicine to Orthodontics (Accelerated Ortho)  $\checkmark$ 
  - **Enhanced Osseointegration and Rx of Peri-Implantitis**

Year End **Offer Price** @ 2,20,000\*

only

aser Innovati odern Health

What we do at AALT India

Laser Dentistry as Easy as

Novo Green

Novo Green

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24 x 7 access to LaserPRO app from Asian Academy of Laser Therapy (AALT Singapore)

\*Laser Price Only

NovoLase ight Inspired

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**Trust the Laser Experts!** 

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## **Clinical Applications**



#### Implantology & Periodontics

- $\cdot$  Enhanced Osseo-Integration
- Procedural Analgesia
- $\cdot$  Peri Implantitis (Prevention & Rx)
- $\cdot$  'Flapless' Non Invasive Perio
- Novo Green PDT for Socket & Surface Disinfection

Mucogingival Surgery



#### Oral, Facio Maxillary & Pediatric Surgery

- Tethered Oral Tissue Surgery (TOTS)
- Hemo Coagulation
- Precise Tissue Ablation in Children
- Implant Exposures
- $\cdot$  Surgical Soft Tissue Excision

#### Aesthetic Dentistry & Cosmetology

- Gummy Smile Correction
- Laser Teeth Whitening
- Fresh Breath Therapy
- Gingival De-Pigmentation
- Facial Acne & Hair Follicle Rejuvenation



## Endodontics

FrenectomyVestibuloplasty

Operculectomy

Gingivectomy

• Painless Single Visit RCT

Crown Lengthening

- Periapical Abscess
- 3D Root Canal Sterilization
- Pediatric Endodontics

#### PhotoBiomodulation (PBM) & PDT

- $\cdot\,$  Non healing Oral Ulcers, Lesions & PMODs
- $\cdot$  TMJ, MPDS, Craniofacial Pain
- $\cdot$  Photo Dynamic therapy with Dyes
- Oral Submucous Fibrosis

Specification	Sub-Specification	Value
Standards	Conformity to International Safety Standards	CE - Medical Device Directive MDD (93/42/EEC)
	Conformity to Manufacturer's Quality Standards	ISO 9001 & ISO 13485
	Conformity certifications for Good Manufacturing Processes	WHO - GMP
Interface	Simple 1-2-3-4 Intuitive Optical Touch Buttons with LCD Display to assist Novice user	
Laser Specifications	Wavelength	810nm (Most versatile for Surgery + PBM + PDT)
	Power Levels	50mw to 6000mw
	Laser Classification	Class IV (4)
	Laser Console / Enclosure	GERMAN - OKW
	Laser Medium	Ga : Al: As Semiconductor Diode
	Optical Delivery System	3rd Generation Permanent Fibre
Accessories	LASER WHITENING PRISM with	24K Gold 'Non Peroxide' Organic Bleach
	Misty Aster Whitening (Optional)	Compatible for Laser Activation
	810 nm PDT	Chitosan Enriched Indo Cyanine Green
	Polyamide Laser Tips	Surgery, Endodontics & Periodontics

FLEXI -18 Advanced Laser Tip for LASER BACTERIAL REDUCTION (LBR)





# How the use of a dedicated Docking Station enhances the life of a Diode Laser?

#### Vibration and Shock Reduction

Dedicated carts or stands are designed to securely hold the laser device in place. They absorb vibrations and shocks that might otherwise be transmitted to the laser diode during movement or handling. This reduces the risk of mechanical stress, which can extend the diode's lifespan.

### **Stability During Operation**

Laser diodes are sensitive to movement and mechanical stress during operation. A stable docking stand ensures that the laser device remains steady, minimizing the risk of misalignment or damage to the diode due to vibrations or jostling.

#### **Optimal Cooling**

Many docking stands are designed with cooling in mind. They often have built-in ventilation systems to dissipate heat generated by the laser diode during use. Maintaining an optimal operating temperature is crucial for the longevity of laser diodes, as excessive heat can degrade their performance and lifespan.

#### **Protection During Transport**

When moving the laser device, especially in institutions or clinical field applications, a dedicated cart provides a safe and secure way to transport it. This reduces the chances of physical damage to the laser diode caused by accidental drops or bumps.

#### **Proper Cable Management**

Docking stands often include cable management systems, which prevent strain on the cables connected to the laser device. Strain on cables can lead to premature wear and tear, and a dedicated stand ensures that cables are organized and protected.

#### Secure Power Supply

Docking stations provide a stable and clean place to power up the laser diode. This reduces the risk of power fluctuations or surges that are common when laser diodes are placed in close proximity to other dental devices due to 'electro magnetic' interferences which can harm the diode. It also prevents accidental disconnection of the power source during critical operations.

#### Alignment Maintenance

Some docking stands have alignment features that help maintain the proper alignment of the laser diode with other optical components. Proper alignment is crucial for the laser's performance and can be difficult to maintain without a stable platform.

#### **Dust and Contaminant Protection**

Depending on the environment in which the laser diode is used, a dedicated stand can offer protection against dust, debris, water, saliva and other body contaminants (when placed on the dental chair tray) that could otherwise accumulate on the diode's optical components and degrade its performance over time.

#### **Enhanced Organization**

A docking station keeps all necessary cables and accessories neatly organized. This minimizes the risk of tangling, misplacement, or damage to the cables, which can prolong the lifespan of your laser equipment.

#### Ergonomic Design & Streamlined Connectivity

Many docking stations are designed with ergonomics in mind. They often allow you to position your laser device at a comfortable viewing or operating angle, reducing strain on your neck and back during prolonged use.

Docking stations often include additional ports and connections which simplify the process of connecting your Laser device to other peripherals or network cables.



Home > Mastering Endo-Laparoscopic and Thoracoscopic Surgery > Chapter

Robotic Surgery: Operating Room Setup and Docking

#### Sajid Malik

Chapter | Open Access | First Online: 17 November 2022

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