

# ML7710

medical laser for clinical use



Modulight's ML7710 is the most versatile medical laser in the world. It is a multichannel & multi-indication medical laser platform - the customer chooses which Modulight lasers are built into the laser. ML7710 is as versatile as a Swiss army knife - and thanks to that, it boasts unmatched security for the investment.



## Multipurpose medical laser

ML7710 is a clinical laser system platform, suitable for various medical applications. Many prestigious medical institutes worldwide are using ML7710 both in clinical and pre-clinical applications.

ML7710 can house up to 8 lasers – optionally with aiming beams. Each laser can be individually configured with a graphical touchscreen interface.

In order to achieve just the correct laser dose every time, ML7710 has an internal calibration unit for application fibers. This provides ultimate clinical quality assurance.

ML7710 is equipped with all required functionalities for safety and usability, such as fiber sensors, foot switch, and safety interlocks.

The treatment flow of ML7710 is efficient and intuitive. Additionally, it can be further customized for indication-specific needs.

## Technical information

- ❑ 1–8 laser outputs, which can be same or different wavelengths
- ❑ Possible to select any Modulight laser in the wavelength range of 400–2000 nm; some of the options in the tables below
- ❑ ML7710 supports all commercially available photosensitizers and multiple indications
- ❑ Laser on/pause controlled by a foot switch
- ❑ Key switch and interlock for laser safety
- ❑ CE mark (Basal cell carcinoma, Non-small cell lung cancer, Head and neck cancer, High grade dysplasia in Barrett's esophagus)
- ❑ ETL mark (US & CAN)
- ❑ CB tested US/CA, EU, CH, Japan, SG, China
- ❑ Comprehensive service and life-cycle support
- ❑ Lowest total cost of ownership (TCO)

## Visible wavelengths

Wavelength	405 nm	425 nm	445 nm	473 nm	520 nm	630 nm	635 nm
Maximum Optical Output Power (combined)	4.5 W	800 mW	8.5 W	4.5 W	5.5 W	4.5 W	12 W
Output fiber Ø <sub>CORE</sub>	105 µm	105 µm	105 µm	105 µm	105 µm	105 µm	200 µm

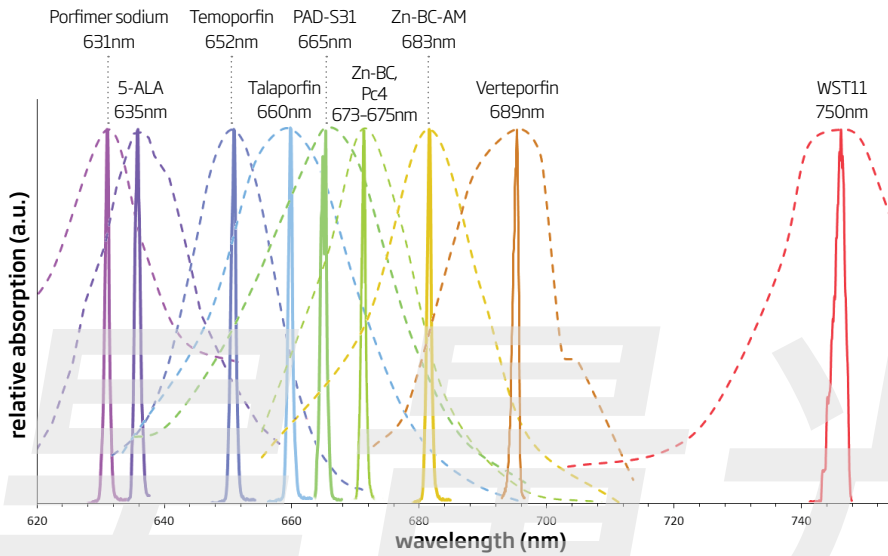
Wavelength	652 nm	658 nm	662 nm	665 nm	670 nm	680 nm	689 nm
Maximum Optical Output Power (combined)	16 W	12 W	12 W	12 W	12 W	12 W	12 W
Output fiber Ø <sub>CORE</sub>	200 µm	200 µm	200 µm	200 µm	200 µm	200 µm	200 µm

## Infrared wavelengths

Wavelength	753 nm	780 nm	810 nm	980 nm	1064 nm
Maximum Optical Output Power (combined)	25 W	120 W	60 W	80 W	70 W
Output fiber Ø <sub>CORE</sub>	200 µm	400 µm	200 µm	105 µm	200 µm

## Application examples and configurations

application	wavelengths (nm)	power (W)
Photodynamic therapy (PDT)	630   635   652   660-690   753	1-15
Surgical	810   940   980   1320   1470   1940	10-50
Dentistry	405   450   665   810   980   1470	1-30
Photo disinfection	635   665   810	1-5
Aesthetic	810   940   980   1470	1-30
Vein treatment	980   1470	10-15
Hyperthermia of tumors	940   980   1064	15-50



The absorption spectra (dashed lines) of common photosensitizers and the laser emission spectra (solid lines) of Modulight lasers.

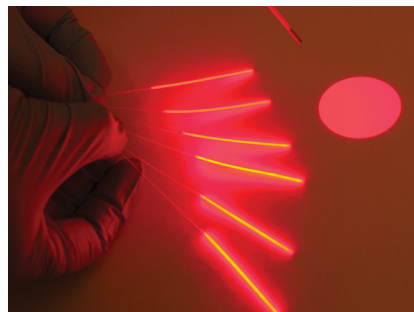
## Medical laser services

- Installation and training
- Technical support
- On-site / factory calibration
- Software updates, hardware upgrades
- Assistance in FDA regulatory filing
- Incident investigation
- Vigilance reporting
- Record retention
- Recycling

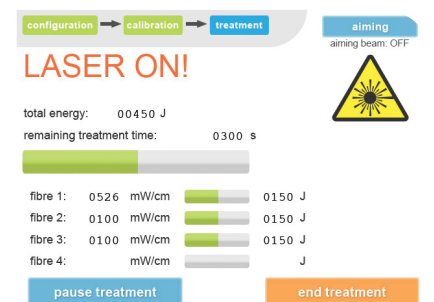
Modulights supports its biomedical customers, lasers and other products provided with comprehensive lifecycle support. Customers can participate to the definition of the treatment flow to meet their exact needs.



Modulight has experience in making all necessary paperwork for regulatory approvals



Up to 8 individually controllable laser channels



Easy dose calibration with a simple and intuitive touch-screen UI



The design and manufacturing processes are done according to ISO 13485:2003 and the design complies with IEC 60601 and FDA CDRH 21CFR1040.10 requirements and regulations. Certified to work with all configurations across 400-2000nm and 0-15W with up to 8 channels.