# dentaLase by QuickLase



Cutting edge technology at an easily affordable price.

Quicklase offers the ability to cut, coagulate and sterilise, additionally for teeth whitening and pain theapy. It reduces both tissue scarring and post-operative discomfort. Healing is rapid and more aesthetic. It provides the perfect outcome for patients and dentists alike.

All the QuickLase systems are small, lightweight and portable.

Ergonomic system for comfortable easy use.

Touch screen with presets, multi-language menus, all intuitive easy to use.

### **TECHNICAL SPECIFICATIONS**

Dimensions	16 x 13 x 16 cm
Weight	1.3 kg
Medium	GaAlAs Diodes
Wavelength	810nm +/- 10
Power Output	0.1 - 5w
Power modes	Continuous/Pulse
Pulse Width	50, 30, 10ms + User
Fibre Diameter	200 - 400 μm
<b>Voltage</b> 100 - 240 V, 1.0 A (50/60Hz)	
Preset Procedures 20	

## **Soft Tissue system**

# 810nm

#### 1. Wavelength

The wavelength used is the most important characteristic. It determines how the laser light interacts with the soft tissue. Notably, the absorption by the appropriate tissue chromophores and the penetration depth into the tissue.

When using only one wavelength of laser light, 810 nm is one of the most versatile overall.

QuickLase always uses 810 nm in all our models as it has a greater effect on coagulation whilst cutting soft tissue.

#### 2. Maximum Power

The output power determines the speed with which the various procedures can be completed.

In dentistry, the hand speed and skill of the practitioner will determine the required power output for that procedure. A higher power will allow for the treatment to be completed faster than a lower power but all procedures can be successfully completed with all our lasers.

QuickLase offers a variety of power options.

#### 3. Emission modes / Usage

The laser can be set to either Continuous Wave or Pulsed Mode (modulated), this relates to the type of output. The prime benefit of the pulsed mode is the capacity of the tissue to cool between successive pulses. This allows for a reduction in the amount of, or in some cases the need for anaesthesia required. This mode is however slower than Continuous Wave mode. Before choosing an emission mode you must also consider the power setting, as the average power with the continuous mode is the power selected, but when you set the pulse mode the average power will be less. The difference is determined by the pulse frequency. That's why you must allow more time when using the pulse mode than continuous mode at the same power output. QuickLase has continuous and pulse modes.

#### 4. Delivery medium

Most dental diode lasers have a flexible fibre optic to deliver the laser output. There are a number of things to consider when using a fibre optic, but the most important is the diameter of the fibre. Using a smaller diameter fibre will increase the power density at the fibre tip, so a smaller diameter fibre will require less power than a larger diameter, and a larger diameter fibre will cover a bigger area.

QuickLase offers two fibre optic diameters, 200  $\mu m$  and 400  $\mu m$  (microns)

#### 5. Price

Of course a determining factor in making a decision is the price. The YAG, Argon & CO2 lasers are expensive compared to Diode technology. QuickLase have developed the use of efficient, reliable diodes in our systems, and being the manufacturer and retailer you can "lase out" the middleman for the best value on the market.