K·LASER

GRANT YOURSELF **THE BEST**

BLUE™ DENTAL

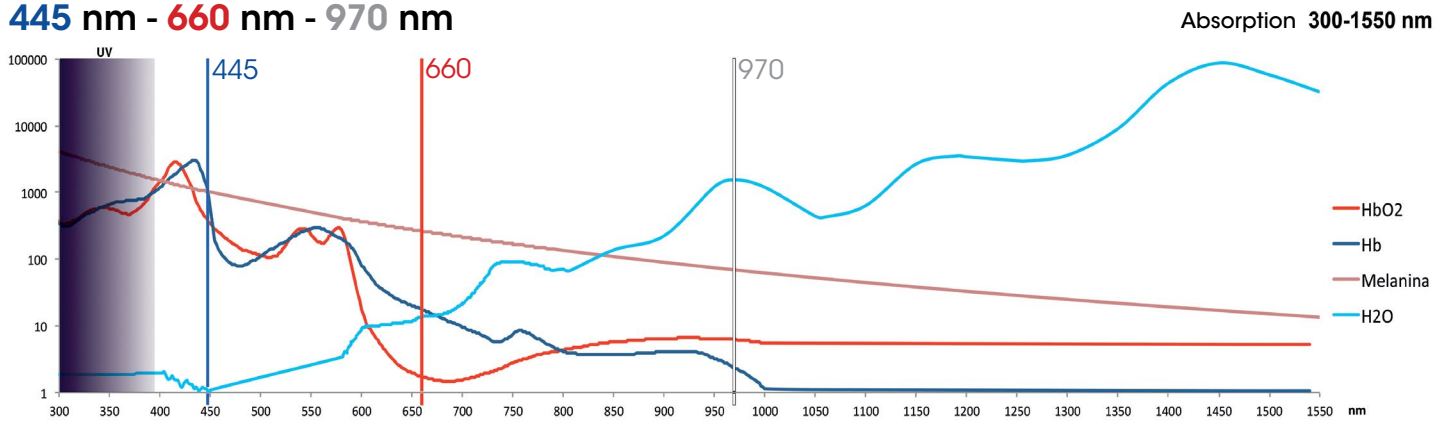
THE FIRST dental BLUE LASER both in clinics and aesthetics operating at 3 wavelengths

THE FIRST LASER IN THE WORLD IN TERMS OF NUMBER OF APPLICATIONS IN THE DENTAL FIELD

K-Laser Blue Dental uses **445 nm as its main wavelength which,** unlike all other infrared lasers, is based on haemoglobin absorption and not on water absorption. This has many surgical advantages. Thanks to higher energy levels compared to infrared lasers, it has an increased germicidal power
The wavelengths, **970 nm** and **660 nm** support both superficial and deep tissue biostimulation.

ADVANTAGES No maintenance, 5-year warranty, low consumables cost and maximum safety. All the components can be sterilised.

K-Laser Blue:
445 nm - 660 nm - 970 nm



High surgical and germicidal activity

The 445mn wavelength interacts with the molecules at the systemic level. It is more easily absorbed by both haemoglobin and melanin, usually bigger than infrared laser. Blue laser is also effective on several bacteria strains, thus exploiting its antiseptic properties. It allows obtaining excellent results in terms of tissue incision both for surgical or vascular purposes.

Faster tissue healing process

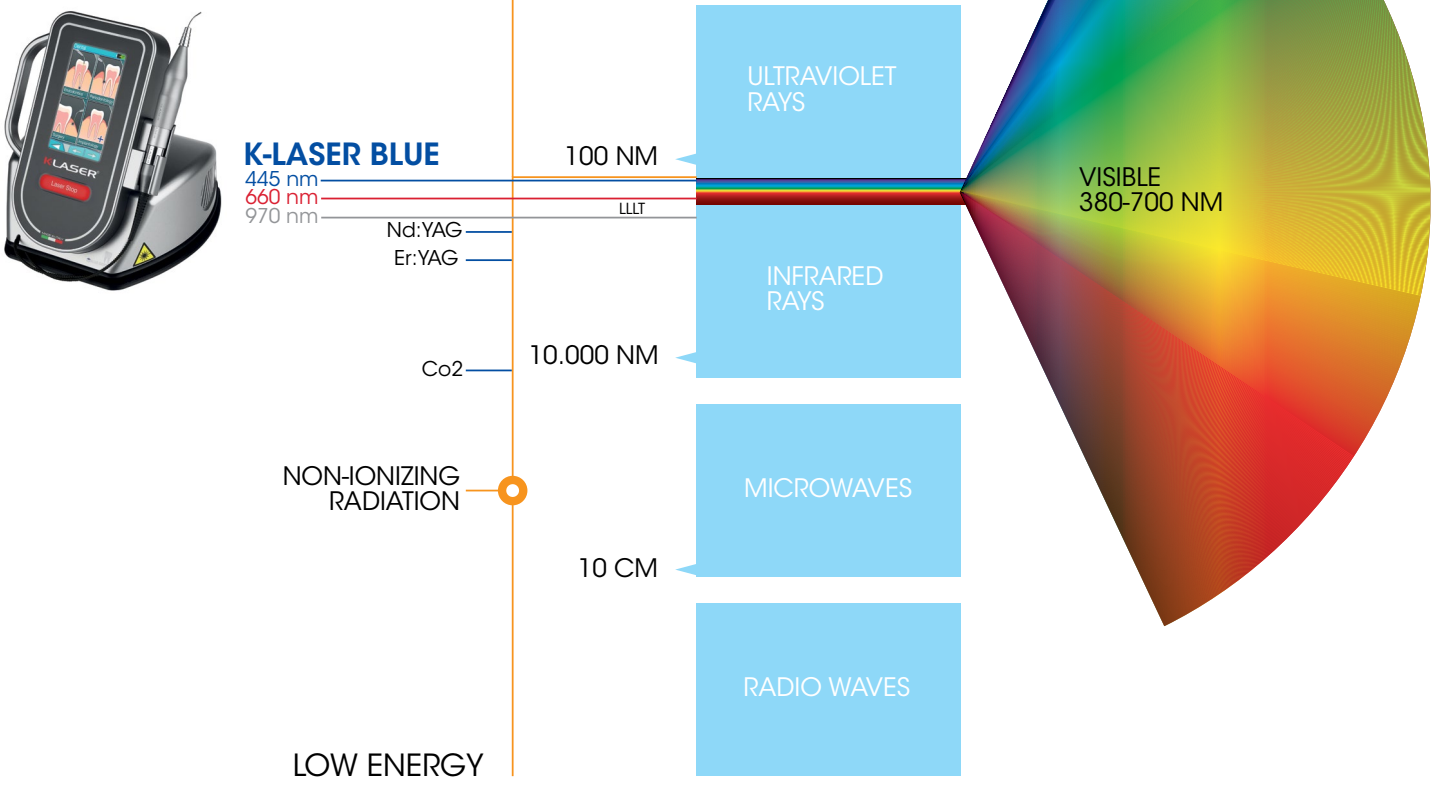
K-Laser Blue Dental wavelengths transfer the right amount of energy on the tissue surface. The energy is stored at a cellular level; this leads to an increase in both the proliferation and the metabolism. Thus, laser therapy allows obtaining excellent results in the tissue healing process.

Cellular biostimulation and post-operative pain relief

Blood, the main transport system, provides the cells with all the elements that are necessary to their metabolism, such as oxygen and nutritional substances, thus removing catabolic products. The water contained in our body is mostly absorbed by the 970mn wavelength and a large part of the laser is transformed into heat. Thus, the deeper tissue layers become localised heat points, able to generate temperature gradients at a cellular level and to stimulate local microcirculation thanks to the increased cellular oxygen supply.

K-LASER BLUE DENTAL
New source of energy

K-Laser Blue: within the electromagnetic spectrum and among non-ionizing radiations, the most energetic wavelength is the one able to produce the maximum benefit for the tissues.

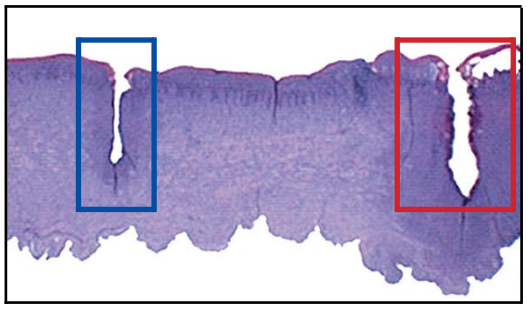


K-LASER BLUE DENTAL
Excellency in surgery

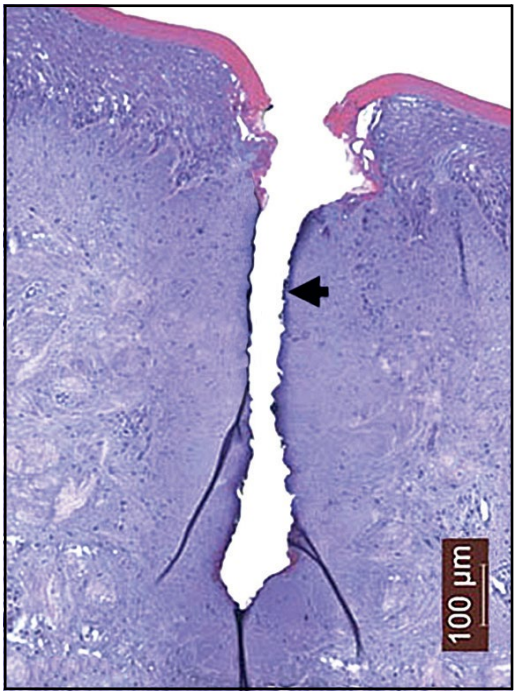
K-Laser Blue has an interface that allows choosing among several treatments, ensuring the best surgical interventions and precise and unrivalled cutting performances.

K-Laser Blue, compared to other dental devices using only one infrared wavelength, uses blue light with a higher surgical performance, thus reducing thermal damage and offering optimal interaction with haemoglobin. Thanks to these features, it can guarantee a far better cutting precision compared to infrared laser.
Thanks to the non-absorption of water, surrounding tissues overheating is drastically reduced.

K-Laser Blue ensures the highest safety as the dental practitioner can avoid using scalpels and stitches thanks to the immediate haemostasis. The use of special sterilisable fibres avoids possible contamination and makes for a clean operating field.

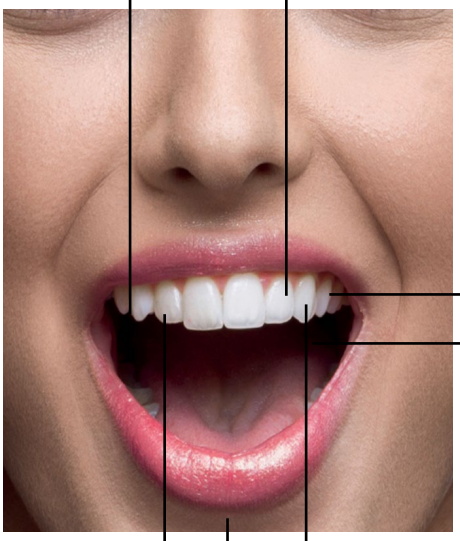


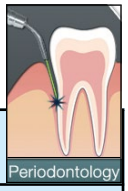
Infrared Laser



K-LASER BLUE DENTAL Applications

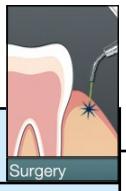
The way in which **K-Laser Blue** special wavelengths interact with the tissues as well as with the transferred energy determines the therapeutic and surgical indications below.





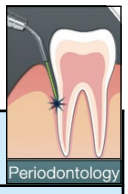
Implantology

- Mucositis
- Perimplantitis
- Sulcular debridement



Dental Surgery

- Abscess
- Angioma
- Epulis
- Fibroma
- Frenectomy
- Gingivectomy
- Gingivoplasty
- Haemostasis
- Implant uncovery
- Incision
- Operculectomy



Periodontology

- OHLLT tooth singlet oxygen
- OHLLT implant singlet oxsigen
- LLLT

Endodontia

- Root germ reduction
- Gangrene germ reduction
- Pulpotomy

Dental laser therapy

- Burning mouth
- Herpes
- LLLT
- Oral lichen planes
- Post-surgical swelling
- Post-surgical wound
- Ulcer/Stomatitis

Aesthetic applications

- Senile lentigo solar
- Acne vulgaris
- Photorejuvenation
- Telangectasias

Restorative dentistry and dental hygiene

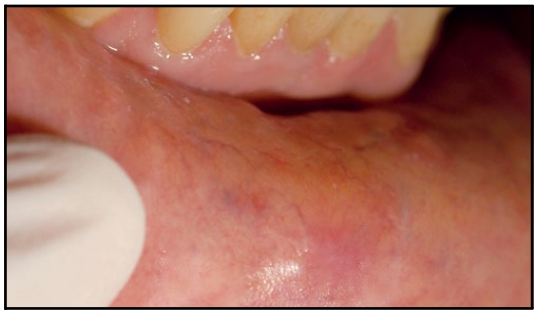
- Dentin hypersensitivity
- Sealant polymerization
- Tooth whitening

K-LASER BLUE DENTAL
Clinical tests

K-Laser Blue Dental can be used to treat infective (viral, bacterial and fungal) and traumatic wounds. In this case, the laser can be used to improve and reduce healing time after oral surgeries (removal of wisdom teeth and gingivectomies). Besides, it can also be used in symptomatic lesions with immune-mediated aetiology (recurrent mouth ulcers, lichen planus, pemphigus and pemphigoid). Lastly, the biostimulation and the analgesia deriving from the use of such wavelengths can be used in ATM dysfunctional pain syndromes.

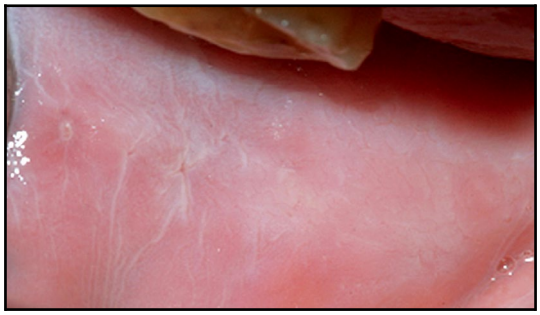
Lower lip herpes wound

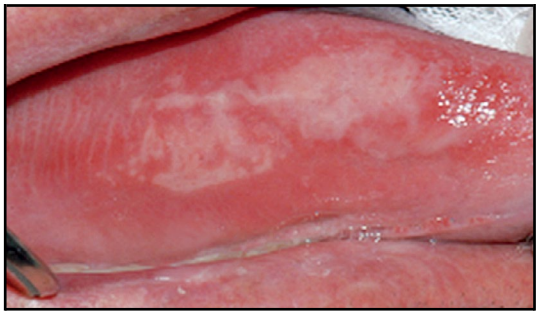
Before



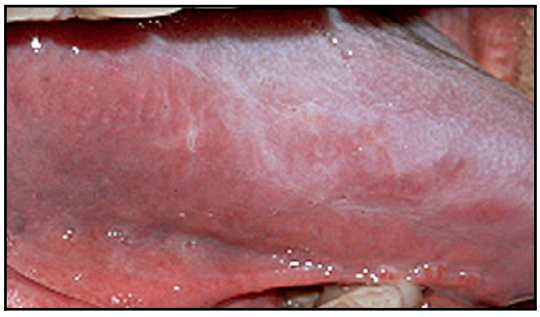
After two laser therapy sessions

Mucositis of the buccal mucosa and the lingual margin





Before



After four laser therapy sessions

K-LASER BLUE DENTAL
Clinical tests

Gingivectomy


Before the operation


End of operation


Check after two days

Gingivectomy


Before the operation


End of operation


Check after 15 days

Epulis

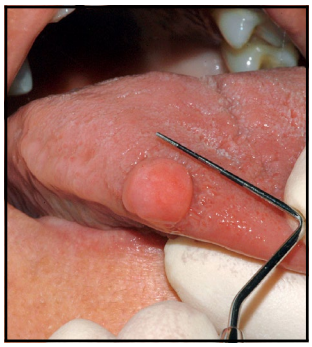

Before the operation


End of operation

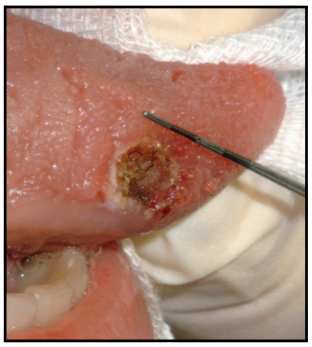

Check after 4 days

K-LASER BLUE DENTAL
Clinical tests

Fibroma


Before the operation


Treatment


End of operation

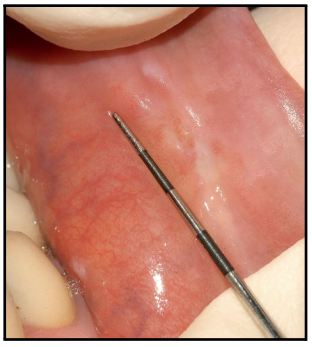

Check after 15 days

Fibroma


Before the operation


End of operation

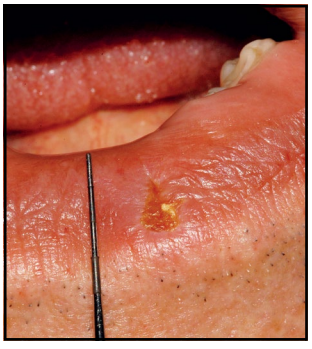

Check after 15 days

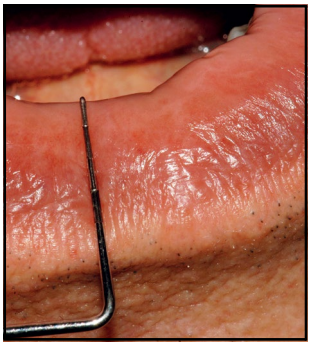

Check after 1 month

Angioma

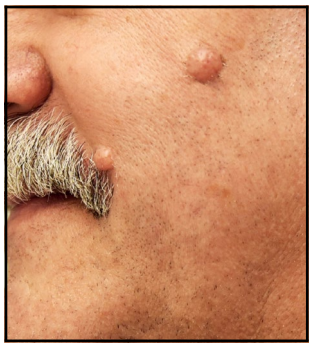

Before the operation


End of operation


Check after 15 days


Check after 1 month

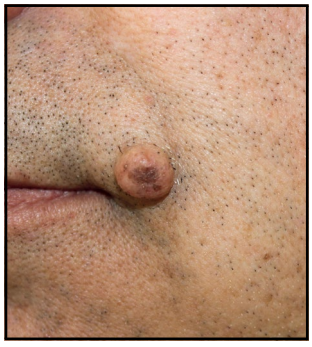
K-LASER BLUE DENTAL
Aesthetic applications


Before

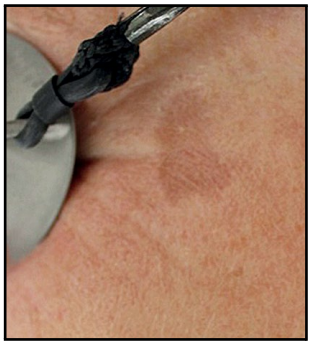

After


Before

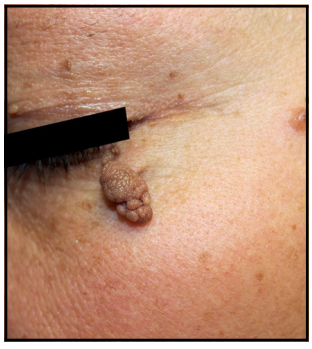

After


Before

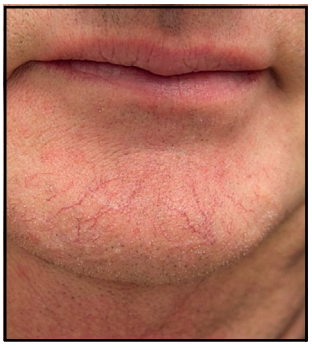

After


Before


After


Before


After


Before


After

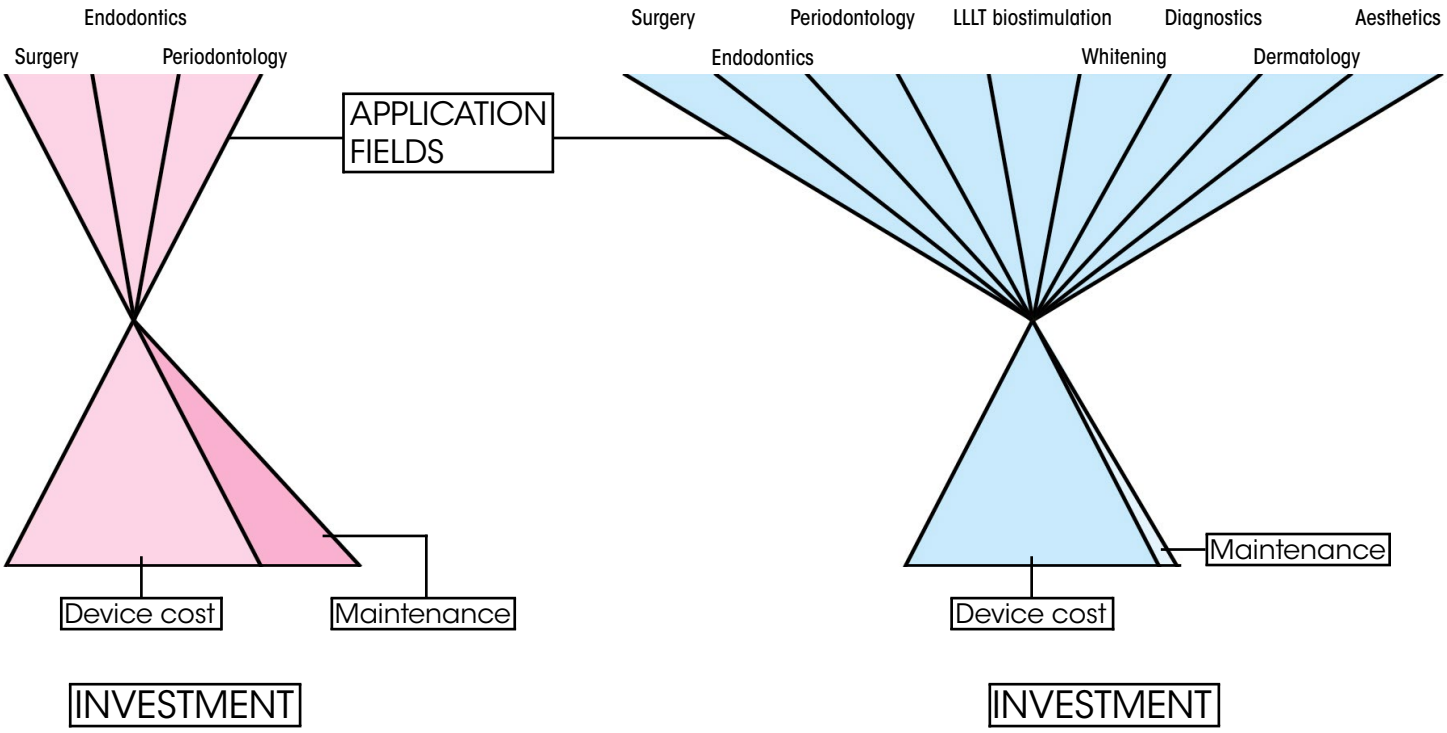
K-LASER BLUE DENTAL

K-Laser **intuitive software** is quick and precise and easily guides the dentist through each available treatment.
The parameters that determine the stage of each treatment, such as wavelength, energy, time, power and frequency, are automatically handled while leaving the operator the freedom to create new personalised protocols.

K-LASER BLUE DENTAL
Safe investment!

K-Laser Blue Dental is different from other laser equipment on the medical market for the wide choice of applications, the lack of maintenance and fast return on investments.

Infrared laser devices



K-LASER BLUE DENTAL

K-Laser has chosen to use semiconductors for their advantages compared to the other technologies on the market. Thus, **K-Laser,** proves to be the brand of the most reliable and compact devices in the world.

	K-Laser Blue	Diode Laser	Nd:YAG laser	Er:YAG laser	Co2
Waivelength	445 nm + 660 nm 970 nm	808 to 980 nm	1064 nm	2940 nm	10600 nm
Model type	Compact	Compact	Large	Extra large model	Extra large model
Maintenance costs	▲	▲	△	—	—
Instructions					
Surgery (soft tissues)	▲	△	△	△	△
Vascular applications	▲	—	—	—	—
Haemosthasis	▲	△	—	—	—
Periodontology	▲	▲	△	—	—
Endodontics	▲	▲	△	▲	—
Desensitisation	▲	△	△	—	—
Biostimulation (LLLT)	▲	▲	△	—	—
Viral, bacterial, fungal infections	▲	△	△	—	—
Teeth whitening	▲	△	—	—	—
Sealing	▲	—	—	—	—
Aesthetic applications	▲	—	—	—	△

▲ = Fit △ = Partially fit — = Unfit

K-LASER BLUE DENTAL
Technical file

K-Laser Blue Dental has been designed in compliance with directives 93/42/CEE and 2007/47/CE about medical products.
According to the norms in force, the device is classified as follows:

Source type	Integrated semiconductor laser module
Laser system	Class IV (compliant with IEC 60825-1)
Product class	Class IIb (compliant with directive 93/42/EEC)
Waivelength (nm)	445 nm ± 5nm; 660 nm ± 10 nm; 970 nm ± 15 nm
Overall power (W) CW	7
Emission Mode	CW (continuous emission), pulsed, modality ISB, modality DISB
Insulation Class	Class II, type B (compliant with CEI EN 60601-1)
Beam Steering	660 nm ± 10 nm, max. 1mW
DNRO	12.46 m max
Laser Activation	wireless pedal
Power supply	Rechargeable battery and external power supply 100 - 240 VAC, 47 - 63 Hz
Display	Full color, LCD touchscreen
Size (W x L x H)	180 x 200 x 200 mm
Body structure	Aluminium body structure with special treatment
Handpiece	Interchangeable in special metal. They can be sterilised
Fibers	200µm 320µm Multiuse sterilizable
Weight	2500 g (including the handpiece and the rechargeable battery)

ACCESSORIES
K-LASER BLUE DENTAL

Revolutionary innovation for advanced teeth laser surgery **K-Laser**

Optic fibre 200µm Art. **6255678**
Optic fibre 320µm Art. **6255629**
Sterilizable

Sterilizable tip
Art. **MP419**

Handpiece body for contact surgery
Art. **MP384**

Sterilizable sleeve for contact surgery
Art. **MP385**

ACCESSORIES
K-LASER BLUE DENTAL

Handpiece body for non-contact surgery
Art. **MP386**

Non-contact surgical spacers set
Art. **MP387A-MP387B-MP387C**

Optic handpiece for therapy
Art. **MP383**

ORL optics for therapy, sealing and whitening Art. **MP388**

Trolley with support for Tips
Art. **IM023**

Wi-FI Pedal
Art.**PF067**

K-Laser suitcase
Art. **IM017A (optional)**

Protective goggles for dentist and for patient
Art.**PF022P**

Protective goggles with glass for patient
Art.**6541523**

Trolley with support for Tips
Art. **PF095 (optional)**

For further information please visit the website www.klaser.eu
or scan this code to find out about the K-Laser Technology

K·LASER

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CE 0476