SiroLaser Blue

Versatility in Laser Dentistry

dentsplysirona.com
SiroLaser Blue – the next step in laser dentistry

Triple-Wavelength-Technology

SiroLaser Blue is equipped with a high-tech laser module, which provides three different forms of laser in a single device.

Blue wavelength 445 nm
Surgery
Best cutting efficiency of all dental diode lasers

Infrared wavelength 970 nm
Endo, Perio and Implantology
Effective wavelength for germ and bacteria reduction

Red wavelength 660 nm
Photobiomodulation
Perfect for Photobiomodulation (PBM) / Low-Level-Laser-Therapy (LLLT)

Absorption of the laser radiation by biological tissue

SiroLaser Trainings

Enhance your knowledge of the science, safety, functionality and importance lasers bring to everyday patient care.
Please contact us: akademie@sirona.com
Blue wavelength – 445 nm

The first Blue Laser for dental use. Blue laser light has a much higher absorption in soft-tissue (i.e. hemoglobin and melanin) than conventional infrared diode laser wavelengths (810nm, 940nm, 970nm). This leads to a much improved soft-tissue cutting efficiency which allows non-contact cutting, a first in dentistry for diode lasers. No fiber initiation is required and non-contact cutting means there is no need to remove tissue residue from the fiber during treatment. Due to the high degree of absorption in hemoglobin, the hemostatic effect is outstanding, helping during all surgical treatments, as well as within CAD/CAM workflow.

Unique cutting efficiency
Non-contact mode & no fiber initiation
Outstanding coagulation

“The cutting performance of 445nm is simply phenomenal and it makes my work even more efficient.”
Dr. Simone Suppelt, Germany

Frenectomy

- Reduced pain and bleeding
- Reduced need for injected anesthesia
- Outstanding hemostatic effect
- No sutures and less scarring
- Accelerated wound healing and improved post-operative experience

Images provided by Dr. Peter Kleemann, Luxembourg

Gingivoplasty

- Easy visualization of tissue contours
- Reduced bleeding
- Improved post-operative experience

Images provided by Dr. Peter Kleemann, Luxembourg

Tissue management

- Replaces retraction cords
- Clearly defined margins around the preparation site
- Minimizes damage and bleeding to the tissue
- Optimal technique for digital impressions

Images provided by Prof. Dr. Giuseppe Iaria & Dr. Matteo Iaria, Italy
Infrared wavelength – 970 nm

Use of infrared laser light leads to improved germ reduction when managing the periodontal disease as an adjunct to scaling and root planing (SRP) as well as after the conventional treatment of the root canal.

So for perio, infrared laser light can be applied to the pockets within the hygiene workflow. The laser assisted periodontal therapy (LAPT) leads to an improved periodontal status without surgical intervention and with minimal discomfort.

For the endodontal treatment the laser is used after preparing and rinsing the root canal in addition to the conventional treatment. The laser effectively reduces germs and bacteria in areas a rinsing fluid can never reach – even deep in the dentinal tubules – leading to better long-term prognosis.

**Effective germ and bacteria reduction**

**Adjunct to conventional periodontal and endodontal treatment**

**Reduced use of antibiotics**

“[The 970-nm diode laser has significantly improved my day-to-day workflow efficiency in addition to having amazing treatment results every time.]”

Dental hygienist Joy Raskie, USA

“[The SiroLaser Blue reduces germs very effectively. I always use the laser for root canal treatments and since then I have had much fewer follow-up treatments because of recurrent inflammation.]”

Dr. Matteo Iaria, Italy
Red wavelength – 660 nm

Red laser light is used for photobiomodulation, also known as low level laser therapy. Photobiomodulation works through the application of photon energy of light to the tissue. It passes through the skin barrier and is absorbed by the cells where it initiates physiological reactions within the mitochondria. Photobiomodulation can be used throughout the dental practice, supporting indications in both surgical and therapeutic procedures.

### Additional treatment options

- Improved wound healing & tissue regeneration *
- Reduction of acute and chronic pain **

* facilitated by the increase of local blood circulation
** with the meaning of temporary relief of minor muscle and joint pain

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### Temporomandibular joint dysfunction (TMJD)

- Pain reduction
- Improvement of mandibular movement; i.e. better mouth opening

Before treatment | Pain TMJ | Pain masseter muscle | After treatment
---|---|---|---

With kind permission of: Dr. Giovanni Olivi, Italy

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### SiroLaser Blue – All indications at a glance

<table>
<thead>
<tr>
<th>Surgery</th>
<th>Endodontics</th>
<th>Periodontology</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abscess</td>
<td>Implant uncovering</td>
<td>Endodontic germ reduction</td>
<td>Periodontic germ reduction</td>
</tr>
<tr>
<td>Epulis</td>
<td>Incisions/excisions</td>
<td>Gangrene germ reduction</td>
<td>Peri-implantitis</td>
</tr>
<tr>
<td>Fibroma</td>
<td>Operculectomy</td>
<td>Pulpotomy</td>
<td>etc.</td>
</tr>
<tr>
<td>Frenectomy</td>
<td>Gingival troughing</td>
<td>etc.</td>
<td></td>
</tr>
<tr>
<td>Gingivectomy</td>
<td>etc.</td>
<td></td>
<td></td>
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<tr>
<td>Gingivoplasty</td>
<td>etc.</td>
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</tbody>
</table>

* "The advent of the 660nm wavelength for Photobiomodulation Therapy has given me more options to enhance my patient treatment and post-op results. With the 970nm wavelength as well this dual wavelength diode laser has everything I need for simple and complex soft tissue procedures."

Dr. Alfred Wyatt, USA
Ergonomic handle for portability and mobility

1 laser - 3 wavelengths
445 nm => blue
660 nm => red
970 nm => infrared

Color touchscreen navigation
user profiles, programmed favorites
and customized applications

Li-ion rechargeable battery
for untethered usage and transport

Disposabel fibers
sterile EasyTips
for immediate and safe treatments

Ergonomic handpiece
with integrated finger switch for true portability
(optional wireless foot pedal)

Cable management
counterclockwise winding solution for safer transport and storage

Scope of delivery
SiroLaser Blue incl. stainless steel handpiece with integrated finger switch
Battery pack (already mounted)
Additional handpiece sleeve for alternating operation efficient
MultiTip 8 mm, therapy light guide
EasyBend - Bending tool
Fibercutter
3 laser safety goggles (for dentist, dental assistant and patient)

Technical data

<table>
<thead>
<tr>
<th>Wavelength and operating performance</th>
<th>Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>445 nm +/-5 nm / 0.2 - 3.0 W (CW)</td>
<td></td>
</tr>
<tr>
<td>660 nm +/-5 nm / 25, 50 and 100 mW (CW)</td>
<td></td>
</tr>
<tr>
<td>970 nm -10/+15 nm / 0.2 - 2.0 W (CW)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Laser operating mode</th>
<th>Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Wave, Chopped Mode</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Ref.</th>
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<tbody>
<tr>
<td>1 - 10,000 Hz</td>
<td></td>
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<table>
<thead>
<tr>
<th>Duty cycle</th>
<th>Ref.</th>
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<tbody>
<tr>
<td>Variable</td>
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<table>
<thead>
<tr>
<th>Weight</th>
<th>Ref.</th>
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<tbody>
<tr>
<td>~ 1.3 kg (incl. handpiece and battery)</td>
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<table>
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<tr>
<th>Dimensions</th>
<th>Ref.</th>
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<tbody>
<tr>
<td>~ 19.7 cm x 18.2 cm x 18.9 cm</td>
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Accessories

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Ref.</th>
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</thead>
<tbody>
<tr>
<td>Handpiece sleeve with keypad</td>
<td>64 87 784</td>
</tr>
<tr>
<td>EasyTip 320 µm (25 pieces)</td>
<td>64 98 062</td>
</tr>
<tr>
<td>EasyTip 200 µm (25 pieces)</td>
<td>64 98 484</td>
</tr>
<tr>
<td>EasyTip 200 µm Endo (25 pieces)</td>
<td>65 35 905</td>
</tr>
<tr>
<td>MultiTip 8 mm, therapy light guide</td>
<td>65 41 465</td>
</tr>
<tr>
<td>MultiTip 4 mm, therapy light guide</td>
<td>65 41 499</td>
</tr>
<tr>
<td>Optic protective cap for handpiece (5 pieces)</td>
<td>65 79 580</td>
</tr>
<tr>
<td>Fibercutter</td>
<td>60 91 669</td>
</tr>
<tr>
<td>EasyBend - Bending tool (2 pieces)</td>
<td>66 18 180</td>
</tr>
<tr>
<td>Wireless foot control</td>
<td>62 56 841</td>
</tr>
<tr>
<td>Laser safety goggles for users</td>
<td>65 41 515</td>
</tr>
<tr>
<td>Laser safety goggles for patients</td>
<td>65 41 523</td>
</tr>
<tr>
<td>Laser safety goggles for eyeglasses wearers</td>
<td>65 46 407</td>
</tr>
</tbody>
</table>

SiroLaser Blue Ref.-No. for the following countries: Germany, Austria 65 40 491; Switzerland 65 40 632; Italy 65 40 657; Netherlands, Belgium 65 40 509; France 65 40 840; UK 65 40 624; Spain 65 40 628; Portugal 65 40 685; Denmark 65 40 646; Finland, Norway, Sweden 65 40 590; Australia 65 73 401; ROW 65 59 111; language extension 65 40 673. Further countries on request.

Please note the following guidelines:

- Laser safety goggles for users
- Laser safety goggles for patient
- Sterile disposable fibers (EasyTips)
- Therapy light guides (MultiTips)
- Laser safety goggles for eyeglasses wearers
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Procedural Solution
Preventive
Restorative
Orthodontics
Endodontics
Implants
Prosthetics

Enabling Technology
CAD/CAM
Imaging
Treatment Centers
Instruments