CALCULASE® III – The End of the Stone Age
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The new 35 Watt desktop laser “CALCULASE® III” from KARL STORZ offers the user an enhanced performance* and optimal user comfort with an excellent price-performance ratio.

CALCULASE® III is...

...powerful

With a power rating of 35 Watt, max. 30 Hertz and max. 4 Joule, the powerful CALCULASE® III is a suitable choice for lithotripsy. In addition, laser technology can be used for the treatment of tissue.

...compact

Thanks to the small, compact design, it fits into every OR – on an equipment cart or in another location.

...efficient

The user can choose between three pulse modes. Depending on the type of treatment required,
the variable pulse length achieves efficient results.

- **Burst mode:**
  The “burst mode” was designed for reducing the repulsion of stone fragments. In this mode, several pulses are emitted in quick succession to reduce stone repulsion during lithotripsy.

- **Short:**
  The short pulse mode can be used for stone fragmentation and tissue ablation.

- **Long:**
  The long pulse mode is suitable for dusting and for coagulation.

Energy and frequency values can be set according to individual needs.

Alternatively, the user has the option of selecting a predefined procedure. For these procedures, the values recommended in the literature for energy, frequency and the respective modes are preset. The following procedures can be selected:

- Lithotripsy (hard calculus)
- Lithotripsy (soft calculus)
- Lithotripsy (dusting)
- Lithotripsy (low repulsion)
- Ablation
- Coagulation

It is also possible to store individual user configurations.

**...user-friendly**

With its modern 10" HD touch screen display, CALCULASE® III features an interface that is user-friendly and displays the relevant data directly.

The green aiming beam makes intraoperative orientation easier for the surgeon.

The smooth surface allows optimal wipe disinfection as the unit design meets hygienic demands. A cover on the fiber connector prevents the penetration of dust.

Furthermore, the user can easily replace the laser protection glass between the laser rod and fiber coupling at any time.

*in comparison to the previous model*
...versatile

Laser technology can be used for the following interventions:

Lithotripsy:
- Lithotripsy in urology (stones in the kidney, ureter or bladder)
- Lithotripsy in gastroenterology (stones in the bile duct or gallbladder)
- Lithotripsy in ENT/OMFS (stones in the salivary duct or salivary glands)

For the treatment of tissue in:
- Urology
- Arthroscopy

...intelligent

The laser is equipped with a fiber identification feature (RFID technology) to enable automatic identification:
- Fibers and the fiber size are identified.
- The number of applications are counted.
- The minimum and maximum setting values are displayed automatically and adjusted accordingly.

Information on the detected fiber is shown on the screen.

KARL STORZ offers both reusable and single-use fibers for CALCULASE® III. The fibers are sterile when delivered so they are available for immediate use. Furthermore, these are backward-compatible with the previous CALCULASE® II model.
CALCULASE® III

Order information

Holmium Laser:

UL 300-1 CALCULASE® III, holmium laser system, 
power supply 230 VAC, 50/60 Hz 
The following accessories are included in delivery: 
ET21-1002 Mains Cord 
27750124 One-Pedal Footswitch 
27750235 Key Set 
UL101 Remote Interlock Connector 
27750095 Safety Goggles Ho:YAG Laser, 2080 nm 
ET42-455452 Ion Exchanger 
UL102 Water Filling Set

Fibers:

<table>
<thead>
<tr>
<th>Package of 1</th>
<th>Reusable</th>
<th>For single use</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCULASE® III Fiber, 230 µm, length 300 cm, reusable/sterile</td>
<td>UL 007</td>
<td>UL 004</td>
</tr>
<tr>
<td>CALCULASE® III Fiber, 365 µm, length 300 cm, reusable/sterile</td>
<td>UL 008</td>
<td>UL 005</td>
</tr>
<tr>
<td>CALCULASE® III Fiber, 600 µm, length 300 cm, reusable/sterile</td>
<td>UL 009</td>
<td>UL 006</td>
</tr>
</tbody>
</table>
Package of 6:

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Reusable</th>
<th>For single use</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCULASE® III Fiber, 230 µm, length 300 cm, reusable/sterile, package of 6</td>
<td>UL 007 S5</td>
<td>UL 004 S5</td>
</tr>
<tr>
<td>CALCULASE® III Fiber, 365 µm, length 300 cm, reusable/sterile, package of 6</td>
<td>UL 008 S5</td>
<td>UL 005 S5</td>
</tr>
<tr>
<td>CALCULASE® III Fiber, 600 µm, length 300 cm, reusable/sterile, package of 6</td>
<td>UL 009 S5</td>
<td>UL 006 S5</td>
</tr>
</tbody>
</table>

Reprocessing container:

- Safe storage thanks to silicone holders
- Simple closure mechanism in the lid
- Carrying handles on the lid
- Break-resistant plastic

We recommend that you reprocess fibers in a wire tray (39555 B).

Optional accessories:

- 27750095 Safety Goggles Ho:YAG Laser
- 27750280 Fiber Stripper Set
- UG210 Equipment Cart, for laser
Instrumentation:

The recommended application-specific instruments in combination with CALCULASE® III can be found in the relevant catalogs for each specialty.

CALCULASE® III Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser type</td>
<td>Holmium:YAG Laser (Ho:YAG)</td>
</tr>
<tr>
<td>Wavelength</td>
<td>2.1 µm</td>
</tr>
<tr>
<td>Power rating</td>
<td>max. 35 Watt</td>
</tr>
<tr>
<td>Frequency</td>
<td>max. 30 Hz</td>
</tr>
<tr>
<td>Energy per pulse</td>
<td>max. 4 J</td>
</tr>
<tr>
<td>Pulse duration</td>
<td>90-2000 µs</td>
</tr>
<tr>
<td>Fibers</td>
<td>single-use and reusable fibers (230 µm, 365 µm, 600 µm)</td>
</tr>
<tr>
<td>Aiming beam</td>
<td>532 nm</td>
</tr>
<tr>
<td>Fiber detection</td>
<td>RFID system</td>
</tr>
<tr>
<td>Activation</td>
<td>one-pedal footswitch</td>
</tr>
<tr>
<td>Electrical requirements</td>
<td>100-240 VAC; 50/60 Hz</td>
</tr>
<tr>
<td>Cooling</td>
<td>internal cooling system</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>18-38 °C</td>
</tr>
<tr>
<td>Dimensions</td>
<td>43 cm (w) x 61 cm (d) x 30 cm (h)</td>
</tr>
<tr>
<td>Weight</td>
<td>35 kg (incl. 2 kg cooling water)</td>
</tr>
<tr>
<td>Display</td>
<td>10&quot; FULL HD touch screen</td>
</tr>
</tbody>
</table>

It is recommended to check the suitability of the product for the intended procedure prior to use.
75 Years

Shaping the Future of Endoscopy with you