The StarFemto is a versatile tool providing excellent results in industrial laser applications such as high precision cutting, surface structuring, drilling and marking of almost all materials without thermal damage.

This reduces the number of process steps, increases yields and facilitates new features and applications in industries such as electronics, semiconductor, micro technology and medical device manufacturing.

**ROFIN makes the difference**

- ROFIN Hybrid MOPA architecture
- Robust design
- ROFIN global on-site support
- Easy system integration and maintenance
- Made in Germany

**Optimized process quality and productivity**

- 700 fs pulse width
- 20 W laser power
- Programmable Burst Mode (patented)
- Repetition rate from single pulse to 2 MHz
- Fast parameter change
- Integration packages for various applications

**ROFIN-BAASEL Lasertech**

is responsible for the laser micro market within the ROFIN group. The wide range of products includes lasers and laser systems for high precision welding, cutting, structuring and drilling. The complete product development is carried out in-house in direct cooperation with customers. Numerous innovations as well as lasers and laser systems installed all over the world indicate the creative energy and product quality of the ROFIN group for more than 40 years.
**StarFemto**

### Specifications

<table>
<thead>
<tr>
<th>StarFemto</th>
<th>E</th>
<th>M</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>nm</td>
<td>1030</td>
<td></td>
</tr>
<tr>
<td>Max. output power</td>
<td>W</td>
<td>20</td>
<td></td>
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<tr>
<td>Max. pulse energy</td>
<td>μJ</td>
<td>20</td>
<td>100</td>
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<tr>
<td>Pulse width (FWHM)</td>
<td>fs</td>
<td>700</td>
<td>800</td>
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<tr>
<td>Min. pulse repetition rate</td>
<td>Hz</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Max. pulse repetition rate</td>
<td>MHz</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Single pulse selection</td>
<td>MHz</td>
<td>up to 2</td>
<td></td>
</tr>
<tr>
<td>Beam quality</td>
<td>M&lt;sup&gt;2&lt;/sup&gt;</td>
<td>&lt; 1.3</td>
<td></td>
</tr>
<tr>
<td>Pulse peak power</td>
<td>MW</td>
<td>30</td>
<td>140</td>
</tr>
<tr>
<td>Beam diameter (1/e&lt;sup&gt;2&lt;/sup&gt;)</td>
<td>mm</td>
<td>3.5 ± 0.5</td>
<td></td>
</tr>
<tr>
<td>Beam divergence (full angle)</td>
<td>mrad</td>
<td>&lt; 0.6</td>
<td></td>
</tr>
<tr>
<td>Polarisation</td>
<td>Linear horizontal</td>
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</table>

### Environmental and Electrical Operating Conditions

<table>
<thead>
<tr>
<th>Environmental and Electrical Operating Conditions</th>
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</thead>
<tbody>
<tr>
<td>Electric VAC/A</td>
<td>400 / 16</td>
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</tr>
<tr>
<td>Frequency</td>
<td>Hz</td>
<td>50 / 60</td>
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<tr>
<td>Max. Power consumption</td>
<td>kVA</td>
<td>3.5</td>
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<tr>
<td>Weight output module</td>
<td>kg</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Weight power supply cabinet</td>
<td>kg</td>
<td>230</td>
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<tr>
<td>Operational temperature</td>
<td>°C</td>
<td>15 – 35</td>
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<tr>
<td>Dimensions output module</td>
<td>mm (h x w x l)</td>
<td>212 x 360 x 670</td>
<td></td>
</tr>
<tr>
<td>Dimension power supply cabinet</td>
<td>mm (h x w x l)</td>
<td>1.114 x 573 x 1.150</td>
<td></td>
</tr>
</tbody>
</table>

### Options

- Complete beam delivery accessories for cutting, ablation, drilling and marking applications
- Power supply as 19” rack mount units for integration

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**LASER MICRO**

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**INVISIBLE LASER RADIATION**

**AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION**

CLASS 1 LASER PRODUCT

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