LightShot Laser Ablation Tool for microdrilling/milling in polymers and hard materials. Full featured, small footprint, exceptional performance; Use your Photons!

**KEY FEATURES**
- 1µm machining resolution
- Switchable demagnification 10-16X
- PC selection from 32 ablation motifs
- >10J/cm² on the part; 2GW/cm² peak
- Motorized X,Y,Z axes for 3D
- Granite base/bridge structure for stability
- Motorized 12.5X zoom, on-axis colour vision
- Auto align to fiducials
- CAD compatible

**APPLICATIONS**
- Milling/drilling of a wide range of polymers & composites
- Deep drilling of orifices in medical components
- Trimming of electronics/sensors

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Laser

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>193nm</td>
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<tr>
<td>Maximum e.d.</td>
<td>&gt;10J/cm²</td>
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<tr>
<td>Rep rate</td>
<td>300Hz</td>
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<tr>
<td>Feature size</td>
<td>5-250µm*</td>
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<tr>
<td>UV resolution</td>
<td>1µm</td>
</tr>
<tr>
<td>Focus Range</td>
<td>50mm</td>
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<tr>
<td>248nm option</td>
<td></td>
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<tr>
<td>Trade-off adjustment for e.d. vs spot size</td>
<td></td>
</tr>
<tr>
<td>500Hz &amp; 1kHz options available</td>
<td></td>
</tr>
<tr>
<td>32 motifs on motorized selector(“e.d. limit at 250µm)</td>
<td></td>
</tr>
<tr>
<td>UVFS/CaF2 optics, 0.2n.a.</td>
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<tr>
<td>Motorized</td>
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</tbody>
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Part positioning

- Travel range: 100mm x 100mm
- Resolution: 1µm
- Repeatability: 1-2µm
- Absolute accuracy: <10µm

Vision Systems

- TTL image: colour
- Zoom Ratio: 12.5X motorized 1000X magnification
- FOV: 220µm min. 5mm max.

Using demag. Switch; small cross 100µm

1µm holes on 10µm pitch

50µm channels in PET

Exposing braid in Pebax

1µm holes on 10µm pitch

1µm holes on 10µm pitch

1µm holes on 10µm pitch

50µm channels in PET

Exposing braid in Pebax