Benefits

- Greater flexibility
  Range of pulses for new and improved applications
- Superior quality
  Industry leading reliability and product warranty
- Increased productivity
  Higher powers and pulse rates for faster processing
- Improved profitability
  Low cost of ownership with no service requirements

Applications

- Ablation
- Cleaning
- Drilling
- Engraving
- Marking
- Micro-machining
- Precision cutting
- Scribing
- Solar cell processing
- Thin film patterning
- Thin foil cutting
- Welding

100W EP-S is ideal for...

High quality cutting & drilling
With peak power >7kW
- Cutting metals & semiconductors
- Drilling holes down to 30µm

High speed micro-machining
With small spot sizes (M² <1.3)
- Cutting & engraving with small features sizes
- Silicon processing
- Ceramics

High speed scribing
With pulse energy >1mJ
- Solar cell processing
- Welding

To Purchase: Call us on +44 (0) 1489 779 696
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SM-S01038_A
**PulseTune functionality**

- 40+ PulseTune waveforms
- Single shot to 4 MHz pulse repetition frequency

**Beam quality**

- S Type ($M^2 < 1.3$)
- Generating very fine spot sizes (<20µm possible) with high stability and large depth of focus

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**Laser characteristics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>SP-100P-A-EP-S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central emission wavelength</td>
<td>nm</td>
<td>1059 - 1065</td>
</tr>
<tr>
<td>Nominal average output power</td>
<td>W</td>
<td>100</td>
</tr>
<tr>
<td>$M^2$</td>
<td></td>
<td>&lt;1.3</td>
</tr>
<tr>
<td>Collimated beam diameter</td>
<td>mm</td>
<td>3 / 5 / 7.5 / 10</td>
</tr>
<tr>
<td>PulseTune waveforms</td>
<td></td>
<td>47</td>
</tr>
<tr>
<td>Maximum pulse energy</td>
<td>mJ</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Maximum peak power</td>
<td>kW</td>
<td>&gt;7</td>
</tr>
<tr>
<td>Pulse duration range</td>
<td>ns</td>
<td>4 - 2000</td>
</tr>
<tr>
<td>Pulse repetition frequency (PRF) range</td>
<td>kHz</td>
<td>1 - 4000</td>
</tr>
<tr>
<td>CW mode (with modulation)</td>
<td>kHz</td>
<td>NO</td>
</tr>
</tbody>
</table>

**System integration details**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>SP-100P-A-EP-S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling</td>
<td></td>
<td>Air</td>
</tr>
<tr>
<td>Beam delivery cable length</td>
<td>m</td>
<td>2</td>
</tr>
<tr>
<td>Laser module dimensions</td>
<td>mm</td>
<td>377 x 249 x 115</td>
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<tr>
<td>Power supply voltage</td>
<td>V DC</td>
<td>24</td>
</tr>
<tr>
<td>Power supply requirement</td>
<td>W</td>
<td>530</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>°C</td>
<td>+5 to +40</td>
</tr>
<tr>
<td>Relative humidity range</td>
<td></td>
<td>5-95% RH (non-condensing)</td>
</tr>
</tbody>
</table>

To learn more about our redENERGY G4 Fiber Laser products visit our website: [www.spilasers.com](http://www.spilasers.com)

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**Terms and Conditions**

All product information is believed to be accurate and subject to change without notice. A complete product specification will be issued on request and also at time of order acknowledgement. The user assumes all risks and liability whatsoever in connection with the use of the product and its application. These lasers are designed as products for incorporation or integration into other equipment.