Short Pulse InnoSlab Lasers
IS-Series

Unique features
- short pulse length
- high pulse energy
- high peak power
- high repetition rate
- compact setup
- flexibility on crystal choice
- tailored beam profile

Favourable applications
- plasma generation
- ablation, structuring and scribing
- glass milling, drilling and cutting
- tool making
- solar cell processing
- pumping of dye laser, OPA, OPO
- PIV and LIF

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## Overview of IS-Series

<table>
<thead>
<tr>
<th>Model</th>
<th>ISxxx-1</th>
<th>ISxxx-2</th>
<th>ISxxx-3</th>
<th>ISxxx-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength [nm]</td>
<td>IR</td>
<td>Green</td>
<td>UV</td>
<td>DUV</td>
</tr>
<tr>
<td>Highest beam quality M²</td>
<td>1.1</td>
<td>1.1</td>
<td>1.6</td>
<td>2</td>
</tr>
<tr>
<td>Max. average power [W]</td>
<td>400</td>
<td>200</td>
<td>70</td>
<td>20</td>
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<tr>
<td>Max. repetition rate [kHz]</td>
<td>150</td>
<td>150</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Max. pulse energy [mJ]</td>
<td>60</td>
<td>30</td>
<td>15</td>
<td>4</td>
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<tr>
<td>Min. Pulse width [ns]</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Energy stability [%] rms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Timing stability [ns]</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Polarisation</td>
<td>&gt; 100:1</td>
<td>&gt; 100:1</td>
<td>&gt; 100:1</td>
<td>&gt; 100:1</td>
</tr>
<tr>
<td>Beam ellipticity (far field) [%]</td>
<td>&lt; 10</td>
<td>&lt; 10</td>
<td>&lt; 10</td>
<td>&lt; 10</td>
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<tr>
<td>Diameter at window [mm]</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Full divergence angle [urad]</td>
<td>500</td>
<td>250</td>
<td>250</td>
<td>225</td>
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<tr>
<td>Point stability [urad]</td>
<td>&lt; 50</td>
<td>&lt; 60</td>
<td>&lt; 50</td>
<td>&lt; 50</td>
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<tr>
<td>Warm-up time, from cold start [min]</td>
<td>15</td>
<td>20</td>
<td>30</td>
<td>30</td>
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<tr>
<td>from standby [min]</td>
<td>8</td>
<td>15</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

## Utility & Ambient Requirements
- **Power supply**: 90 - 264V, 50/60Hz or 180 - 264V, 50/60Hz
- **Power**: 1kW-4kW
- **Chiller**: 230, 208, 115, 100V, 50/60Hz or 460/280V, 50/60Hz
- **Power**: 1kW-4kW
- **Operating ambient Temperature**: 15°C to 35°C
- **Relative Humidity, non-condensing**: 10% to 80%

## Dimensions & Weights
- **Laser head**: 650mm x 178mm x 157mm
- **Supply incl. Chiller**: 19” x 11HU x 700mm
- **Laser head**: 34kg
- **Supply incl. Chiller**: 68kg

EdgeWave follows a policy of continuous product improvement. Specifications are subject to change without notice.

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