Industrial excimer lasers for precision ultraviolet machining in the manufacture of electronics, semiconductor, and medical components.

- ICON™ (Integrated Ceramic On Nickel) technology for extended gas lifetimes
- Gate valves retain gas fill and preserve passivation during optics maintenance
- High stability optics mounts for the ultimate in pointing stability
- Optional resonator optics available for improved spatial coherence
IPEX™ 800 Series Lasers

Designed for high duty cycle operation in a manufacturing environment, IPEX series lasers deliver high power excimer laser machining with state of the art performance.

Incorporating GSI Lumonics’ proprietary ICON™ (Integrated Ceramic On Nickel) technology, IPEX lasers offer long gas lifetimes, superior optical stability, and precise control of laser operating parameters.

Features
- Icon laser tube
- Gate valves
- INDEX optic mounts
- Keyed optics
- Stable laser energy control
- Soft preionization
- Internal gas purification

Benefits
- 50 million pulse gas lifetime (300 mJ, 200 Hz, KrF)
- Simplifies optical maintenance, retains gas fill
- Delivers 200 microradian pointing stability
- No realignment required after cleaning or replacing optics
- Fast, precise energy stabilization in internal, burst and external trigger modes
- Extends gas life, enhances energy stability to sigma value typically ±2%
- Removes particulates and keeps optics clean

Specifications

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>K-F</th>
<th>XeCl</th>
</tr>
</thead>
<tbody>
<tr>
<td>248</td>
<td>308</td>
<td></td>
</tr>
<tr>
<td>308</td>
<td>250</td>
<td></td>
</tr>
</tbody>
</table>

| Pulse Energy (mJ) | IPEX-848 | 80 | 50 |
| Average Power (W) | IPEX-846 | 40 | 25 |
| Repetition rate (pps) | IPEX-848 | 200 | 200 |
|                    | IPEX-846 | 100 | 100 |
| Pulse Duration (ns) | 12 - 20 |
| Beam Dimensions (mm) | 12 x 25 |
| Beam Divergence (mrad) | 1 x 3 |

Facilities

- Electrical: 3-phase, 4 wire, 208 or 400 VAC, 50 or 60 Hz, 20A
- Cooling water: 10 liters/minute, 5 – 20°C, 40 – 60 psig
- Laser gases: Kr or Xe rare, F2 or HCl halogen, Ne and He buffer or Pre-mixed gas
- Weight installed: 230 kg
- Shipping weight: 290 kg

Specifications are subject to change. Consult GSI Lumonics for complete details.

For sales information, visit our web site or contact your local distributor.

www.gsilumonics.com

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