JK125P, JK300P and JK300HP
A new generation of JK Pulsed Nd:YAG lasers

The JK125P, JK300P and JK300HP combine higher peak powers with shorter pulse lengths for increased flexibility and maximised process control for faster, more precise welding and fine cutting applications.

- Most compact footprint in class.
- Faster control interfaces and complete cycle programming triggered by a single command through our unique LaserView™ control technology.
- Class leading reliability and built in back reflection protection with our patented Luminator™ plu-and-play fiber optic delivery system.
- Tighter process control and reduced costs with our “pulse shaping” feature via our patented switch-mode power supply.
- Fully integrated time- and energy-share options.
Production proven, with field tested enhancements

The award winning JK700 series of Nd:YAG lasers has long been the benchmark by which pulsed Nd:YAG laser performance has been measured. In our new generation JK-HP and P series lasers, GSI Group has combined over three decades of experience in industrial laser manufacture with enhanced technologies for the best overall value, dependability and cost of ownership for users of pulsed lasers.

Spanning a range of power levels, the JK-HP and P series marks the introduction of a number of valuable feature as standard across the JK™ product line, enhancing performance and process efficiencies while reducing integration and operating costs, training and parts hoiling requirements for all users. These include such unique JK features as: LaserView™ control technology, enabling complete cycle programming triggered by a single command, patented Luminator™ fiber optic beam delivery with back reflection protection; pulse shaping capability for tighter process control; faster shutter interface for quicker response on parameter changes and more precise timing in time-share mode; and fully integrated time and energy shares for faster switching and reduced maintenance costs.

Backed by GSI Group’s industry-leading applications expertise and worldwide support network, these reliable lasers will work harder than ever for you.

### Performance Data

<table>
<thead>
<tr>
<th></th>
<th>Single Lamp</th>
<th>Twin Lamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>JK125P</td>
<td>JK300P</td>
</tr>
<tr>
<td>Max. Average Power at Laser</td>
<td>125W</td>
<td>300W</td>
</tr>
<tr>
<td>Typical Power and Workpiece</td>
<td>100</td>
<td>250</td>
</tr>
<tr>
<td>Max. Peak Power</td>
<td>2.3</td>
<td>5</td>
</tr>
<tr>
<td>Max. Pulse Energy</td>
<td>17</td>
<td>40</td>
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<tr>
<td>Max. Frequency</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>Pulse Width Range</td>
<td>0.2 - 20</td>
<td></td>
</tr>
<tr>
<td>Pulse to Pulse Stability</td>
<td>± 3%</td>
<td></td>
</tr>
<tr>
<td>Shutter Opening Time</td>
<td>&lt;50</td>
<td></td>
</tr>
<tr>
<td>Beam Quality</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Standard Fiber Diameter</td>
<td>150</td>
<td>300</td>
</tr>
<tr>
<td>Standard Fiber Length</td>
<td>5, 10, 15</td>
<td>5, 10, 15, 30</td>
</tr>
<tr>
<td>Beam Delivery Options</td>
<td>Up to 4T or 3E or 2Tx2E combination</td>
<td></td>
</tr>
<tr>
<td>Max. Recollimating Lens Focal Length with 60mm square Output Housing</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>With 40mm square Output Housing</td>
<td>100</td>
<td></td>
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</tbody>
</table>

### Environmental Data

- **Cooling Water Requirements @ 15°C**
  - 10 l/min: 2.5 US gal/min
  - 15 l/min: 4.0 US gal/min
  - 22 l/min: 5.8 US gal/min

- **Cooling Requirement**
  - 6
  - 9.5
  - 13.7

- **Max. Pressure Drop**
  - 2

- **Max. Inlet Pressure**
  - 6

- **Electrical Requirements**
  - 380 - 415 V +/- 10% at 50/60 Hz

- **Supply Rating**
  - 8
  - 11
  - 15

- **Max. Power Consumption**
  - 6
  - 9.5
  - 13.7

- **Ambient Temperature**
  - 5 - 40

- **Humidity**
  - 95% RH at 20°C, 50% RH at 40°C

- **Weight**
  - 222
  - 224
  - 266