The VHE (Very High Efficiency) acousto-optic Q-Switch is ideal for use in high gain, high power, linearly polarised Nd:YAG & NdYVO₄ lasers. Using a unique patented acousto-optic design, it provides up to 96% single pass loss modulation, compared to ~85% for conventional designs.

Utilising our ‘Stallion’ manufacturing technique providing superior corrosion resistance whilst maintaining optimum performance and RF power handling capabilities up to 100W.

In addition to the standard product shown, custom configurations are available for specialised applications. These include alternative housing options and custom wavelengths.

Our scientists and engineers are available to assist in selecting the most appropriate model of Q-Switch and also RF driver for your application.

Please contact the sales team for further information.
General Specifications

- Interaction material: Crystal Quartz
- Wavelength: 1064nm
- AR coating reflectivity: < 0.2% per surface
- Damage threshold: > 1GWcm²
- Transmission (single pass): > 99.6%
- RF Frequency: 68MHz
- VSWR: < 1.2:1 (50Ω input impedance)
- RF power rating: 100W cw (max)
- Loss Modulation: > 95% (single pass)
- Water flow rate: > 190cc / minute
- Water-cooling channel material: Stainless steel 316
- Recommended water temperature: +22°C to +32°C
- Thermal switch cut-off: +65°C +/- 5°C
- Storage temperature: -20 to +70°C

Ordering Codes

Example: I-QS068-2.5V10G-N5-ST3 (Q-Switch, 68MHz, 2.5mm active aperture, VHE, Crystal Quartz, 1064nm, 4mm OD straight push fit water-connectors, BNC, Stallion housing with M3 mounting holes)

<table>
<thead>
<tr>
<th>Code</th>
<th>Active aperture</th>
<th>Code</th>
<th>Water connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.6</td>
<td>1.6mm</td>
<td>N</td>
<td>4mmOD straight push fit</td>
</tr>
<tr>
<td>2</td>
<td>2.0mm</td>
<td>P</td>
<td>6mmOD straight push fit</td>
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<tr>
<td>2.5</td>
<td>2.5mm</td>
<td>Q</td>
<td>4mmOD right angle push fit</td>
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<td>3</td>
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<td>U</td>
<td>8mmOD straight push fit</td>
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<td>4</td>
<td>4.0mm</td>
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As part of our policy of continuous product improvement we reserve the right to change specifications at any time.