Imagine the ability to generate precise light in a compact, environmentally hardened package.

**Aculight’s Perseus-TS™ does just that.** As one of the industry’s leading laser development centers, Lockheed Martin Aculight is recognized around the world for its robust, reliable and innovative lasers. And Perseus-TS™ is no exception. The 1.54 micron, high-power, pulsed fiber laser generates short pulses, 2.5-4 ns, over a wide range of repetition rates from 6-750 kHz.

**Applications**
- Laser Detection and Ranging (LADAR)/Rangefinding
- Surveillance
- Mapping
- Sensing
- Seed for power amp

**Features**
- Fully self-contained
- High beam quality
- Optical trigger out (T₀)
- Ultra low jitter
- -10°C to 55°C operation
- Compact package

**Enabling Technology**
Perseus-TS™ offers exceptional beam quality and is fully self contained, making it ideally suited for deployment in ground or aerial vehicle sensors. Up to 6W of average power and 60 µJ of pulse energy are available in a fiber output with M² < 1.3.

**Typical Performance and Characteristics**
- **Wavelength:** 1.541 µm
- **Average power:** Up to 6W
- **Pulse energy:** Up to 60 µJ
- **Pulse width:** 2.5 to 4ns
- **Peak power:** Up to 15 kW
- **Beam quality:** M² < 1.3
- **Polarization:** Random
- **Pulse repetition frequency:** 6-750 kHz
- **Electrical power:** 24 VDC
- **Trigger:** TTL or LVDS
- **Dimensions:** 2"H x 6.3"W x 5.5"D
- **Weight:** < 3.3 lb
- **Cooling:** Conduction
- **Operating temperature:** -10°C to 55°C

**Interfaces**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery fiber connector</td>
<td>FC/APC</td>
</tr>
<tr>
<td>Delivery fiber length</td>
<td>30 cm standard, Optional 1.0 m (limited availability)</td>
</tr>
<tr>
<td>Optical trigger (T₀)</td>
<td>FC/UPC</td>
</tr>
<tr>
<td>Collimator</td>
<td>Optional 4.5 mm, 7.8 mm or 9.0 mm</td>
</tr>
<tr>
<td>Power conditioning</td>
<td>24 +/- 0.5 VDC, 250 mV pk-pk ripple</td>
</tr>
<tr>
<td>Power &amp; Control</td>
<td>Micro-D, 37 pin</td>
</tr>
<tr>
<td>Cooling</td>
<td>Optional heat sink and fans available</td>
</tr>
</tbody>
</table>

**Mechanical Dimensions (Inches)**

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Warning: Hand and Finger Protection
Wear appropriate laser protective eye wear.
Direct or scattered laser light may cause eye injury.

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