The DLEM 17 measures 50 x 18 x 34 mm and weighs only 25 grams yet ranges to targets out to 8 kilometers, this combination enables our customers to develop the most advanced compact and lightweight products for their applications.

Derived from the field proven DLEM 20 it comes with the same robustness to withstand shock loads up to 1,500 g while offering a wide operational temperature range of -40 °C to +80 °C making it the ideal sensor for tactical use and in harsh environments.

The highly optimized power management systems makes it the ideal laser rangefinder module for battery-powered applications, where long mission times are crucial.

Utilizing the identical electrical and communication interface as the rest of the DLEM-family the new DLEM 17 can be easily adopted and integrated into existing platforms.

Your advantages:

- **Lightweight & Compact**: Weighing 25 g while being very small support miniaturized solutions
- **Efficient**: The fast startup time and the low power consumption guarantee long mission times
- **Safe & Tactical**: Totally eye-safe while being invisible to IR-based night vision equipment
- **Fast & Accurate**: 25 Hz ranging enables tracking applications while 1 m accuracy supports high precision systems
- **Robust & Reliable**: Shock proof with a wide operational temperature range support integration into highly demanding systems
- **Advanced optical design**: Low divergence enables high range performance on small targets while having a uniform illumination of the target eliminating the need for a preferred orientation
The DLEM 17 is compact yet incredibly powerful when ranging non-cooperative targets. Small, lightweight, robust, efficient, accurate – ideal for use in demanding mobile and handheld applications.

### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement principle</td>
<td>Pulse accumulation</td>
</tr>
<tr>
<td>Wavelength (nominal at 20 °C)</td>
<td>~ 1.55 µm</td>
</tr>
<tr>
<td>Laser classification</td>
<td>Laser class 1 (IEC 60825-1:2014)</td>
</tr>
<tr>
<td>Modes of operation</td>
<td>Single measurement, continuous ranging 1 Hz to 25 Hz</td>
</tr>
<tr>
<td>Divergence</td>
<td>~ 0.8 mrad</td>
</tr>
<tr>
<td>Measurement range</td>
<td>10 m to 8,000 m</td>
</tr>
<tr>
<td>Measurement resolution</td>
<td>0.1 m</td>
</tr>
<tr>
<td>Range gate resolution</td>
<td>1 m</td>
</tr>
<tr>
<td>Measurement time (selectable)</td>
<td>10 ms to 3,000 ms</td>
</tr>
<tr>
<td>Multiple target detection – number of targets</td>
<td>5</td>
</tr>
<tr>
<td>Multiple target discrimination</td>
<td>≤ 25 m</td>
</tr>
<tr>
<td>Measurement accuracy (1σ)</td>
<td>≤ 1 m</td>
</tr>
</tbody>
</table>

**Typical measurement range**
- Small target (0.75 m × 0.75 m, albedo 30%, 10 km visibility): ≥ 2,000 m
- NATO standard target (2.3 m × 2.3 m, albedo 30%, 10 km visibility): ≥ 3,000 m
- Extended target (Beam filling, albedo 50%, 23 km visibility): ≥ 4,500 m

**Mechanical**
- Weight | ≤ 25 g |
- Dimensions (L × W × H) | 50 mm × 18 mm × 34 mm |

**Environmental**
- Operating temperature | -40 °C to +80 °C |
- Storage temperature | -46 °C to +85 °C |
- Protection class | IP00 |
- Mechanical shock | 1,500 g, 0.7 ms |

**Electrical and communication**
- Input voltage range | 2 V DC to 5.5 V DC |
- Power consumption | ≤ 0.01 W | ≤ 2 W |
- Startup-time (off | ready to measure) | ≤ 85 ms |
- Data interface | UART (LVTTL 3.3 V) |
- Interface connector | Molex # 503763 - 0691 (mates with # 503764 - 0601) |

**Fields of application:**
- Micro-Gimbals for UAV and UGV
- Handheld surveillance and reconnaissance systems
- Handheld fire control systems
- Space and satellite technology

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It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.

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