

## DLEM 17 – for where SWaP really matters

New

The DLEM 17 measures 50 x 18 x 34mm 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 1,500g 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 I<sup>2</sup>-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.

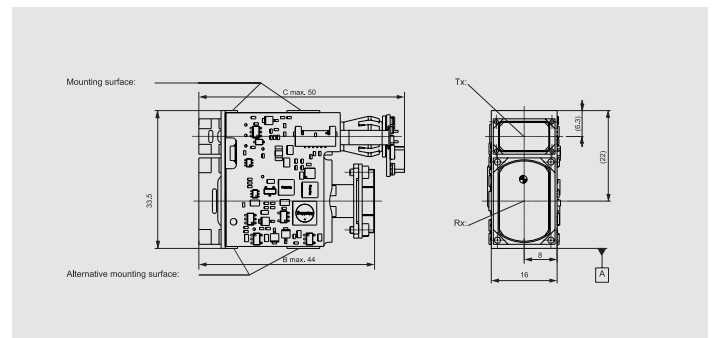
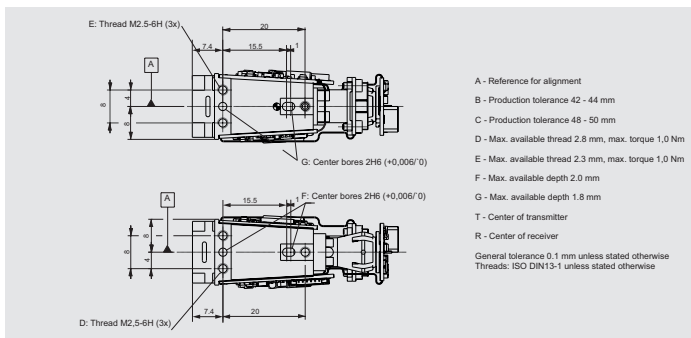
## Technical data

### Technical specifications

Measurement principle	<b>DLEM 17</b> Pulse accumulation
Wavelength (nominal at 20 °C)	~ 1.55 µm
Laser classification	Laser class 1 (IEC 60825-1:2014)
Modes of operation	Single measurement, continuous ranging 1 Hz to 25 Hz
Divergence	~ 0.8 mrad
Measurement range	10 m to 8,000 m
Measurement resolution	0.1 m
Range gate resolution	1 m
Measurement time (selectable)	10 ms to 3,000 ms
Multiple target detection – number of targets	5
Multiple target discrimination	≤ 25 m
Measurement accuracy (1σ)	≤ 1 m
<b>Typical measurement range</b>	
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
<b>Mechanical</b>	
Weight	≤ 25 g
Dimensions (L × W × H)	50 mm × 18 mm × 34 mm
<b>Environmental</b>	
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
<b>Electrical and communication</b>	
Input voltage range	2 V DC to 5.5 V DC
Power consumption Operational   During measurement	≤ 0.01 W   ≤ 2 W
Startup-time (off   ready to measure)	≤ 85 ms
Data interface	UART (LVTTTL 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



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