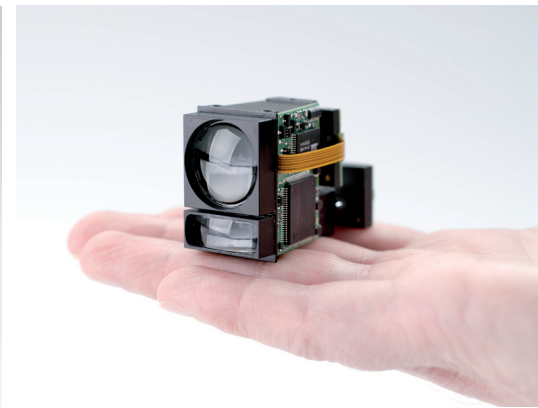




## DLEM Laser Rangefinder Modules

Compact 1.5  $\mu\text{m}$  Laser Rangefinders for System Integration



### Compact and easy to integrate.

DLEM laser rangefinder modules measure distances up to 5 000 meters fast and with an absolute accuracy of better than one meter. Reliable measurement is warranted within a wide operational temperature range and even under low visibility conditions (fog, rain, snow).

Extremely lightweight, compact design allows for easy integration into various handheld, mobile or stationary measuring or fire control systems. Compact design and low power consumption meet the requirements for light infantry equipment. Especially the DLEM SR is considered the world's most compact laser rangefinder of its class.

DLEM laser rangefinders are suited for use under harsh environmental conditions and in weapon mounted equipment. Operating at 1.5  $\mu\text{m}$ , the rangefinder are eye-safe laser class 1.

### Benefits

- Compact, lightweight design & low-power consumption
- Reliable & accurate results under harsh operating conditions
- Wide target reflectivity range (includes retro-reflectors)
- Eye-safe and not detectable with night vision devices

### Applications

- Handheld or portable fire control systems (FCS) for grenade launchers, air-burst ammunition or RPGs
- Sensor platforms for UAVs
- Riflescopes for snipers and long distance shooters

### Leading Technology by Tradition

*Jenoptik's expertise in development and production of laser rangefinder solutions for various applications builds on more than 30 years of experience – a reliable partner.*

# DLEM Laser Rangefinder Modules

## Compact 1.5 $\mu\text{m}$ Laser Rangefinders for System Integration

### Specifications

General	DLEM SR	DLEM 1k	DLEM 2k	DLEM 4k
Wavelength	1.55 $\mu\text{m}$			
Laser classification	Class 1 (EN 60825-1:2007)			
Divergence	~ 1.7 mrad	~ 1.1 mrad	~ 1.1 mrad	~ 0.7 mrad
Measurement modes	Single measurement   Continuous ranging up to 25 Hz			

#### Performance

Total measurement range	0 ... 5 000 m			
Measurement range gate	0 ... 5 000 m (1 m increments)			
Measurement accuracy [1 $\sigma$ ]	$\leq 1$ m			
Measurement resolution	0.1 m			
Measurement time, selectable	100 ... 3 000 ms			
Multiple target detection	up to 5 targets			

#### Typical Measurement Range

NATO standard target <sup>1</sup>	$\geq 1\,700$ m	$\geq 3\,000$ m	$\geq 3\,300$ m	$\geq 4\,200$ m
Man sized target <sup>2</sup>	$\geq 1\,000$ m	$\geq 2\,000$ m	$\geq 2\,200$ m	$\geq 2\,900$ m

<sup>1</sup> Size 2.3 m x 2.3 m, Albedo 30%    <sup>2</sup> Size 0.5 m x 1.75 m, Albedo 30%

#### Mechanical

Weight	$\leq 38$ g	$\leq 95$ g	$\leq 120$ g	$\leq 170$ g
Dimensions [mm, L x W x H]	54 x 22 x 34	97 x 25 x 50	95 x 36 x 50	110 x 46 x 70

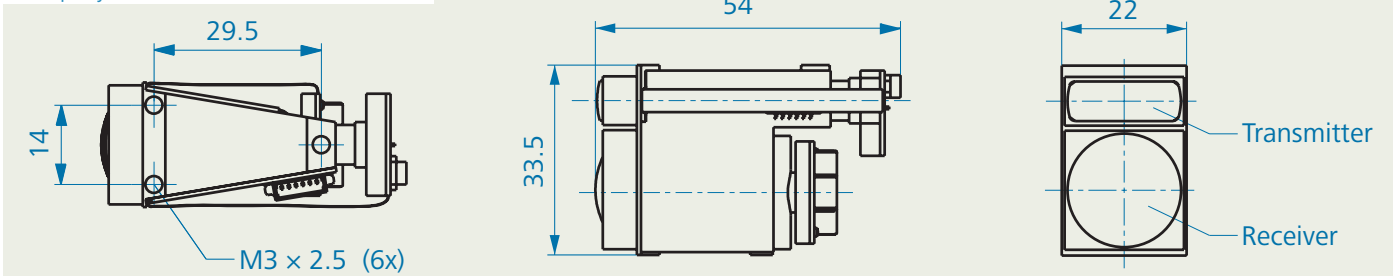
#### Electrical

Power supply	2 ... 3 VDC	4 ... 10 VDC		
Inrush current ( $\leq 1$ ms)	$\leq 1$ A			
Power consumption while measuring	$\leq 2$ W	$\leq 3$ W		
standby	$\leq 0.03$ W	$\leq 0.03$ W		
Data interface	UART (LVTTTL 3.3 V)			
Connector type	Molex #53261-0671 (counterpart #51021-0600)			

#### Environmental

Operational temperature	- 40 ... + 80 °C			
Storage temperature	- 46 ... + 85 °C			
Mechanical shock	1 500 g, 0.7 ms			1 000 g, 1 ms

#### Exemplary Module Dimensions for DLEM SR



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



JENOPTIK | Defense & Civil Systems  
 ESW GmbH | Business Unit Sensors  
 Pruessingstrasse 41 | 07745 Jena | Germany  
 Phone +49 3641 65-3041 | Fax -3573  
 sensorsystems.dcs@jenoptik.com  
 www.jenoptik.com



Distributor for USA  
 International Defense & Security Solutions, Inc.  
 525K East Market St. | #156  
 Leesburg, VA 20176 | USA  
 Phone 1.800.644.5098 x101 | Fax 702.232.1439  
 info@idssi.com | www.idssi.com

01262931/32/33-002-99-14-1115-en