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## LRF Series Integrated Miniature Laser Rangefinder

LRF series Integrated Miniature Laser Rangefinder MLR is designed for SWAP-sensitive platforms including dismounted soldier hand-held systems, stabilized electro-optical turrets and ground vehicles. Based on a diode pumped Er:Glass laser, the LRF series provides fast pulse repetition rates of 10 Hz. Working at an eyesafe wavelength of 1535 - 1554 nm, it is eyesafe according to laser class 1M.

The compact design allows for easy integration into various measuring systems. The rangefinder is prepared for an external power net and can be controlled via a RS232 interface. Following Commercially Developed/ Military Qualified (CDMQ) model, the LRF rangefinder series was designed to be suitable for commercial and military applications alike. The LX is ideal for dynamic environments, such as ranging off moving platforms and/or ranging moving targets. Integration into larger assemblies such as handheld systems, gimbals, masts, or UAVs is simplified with its small size and ample mounting features.

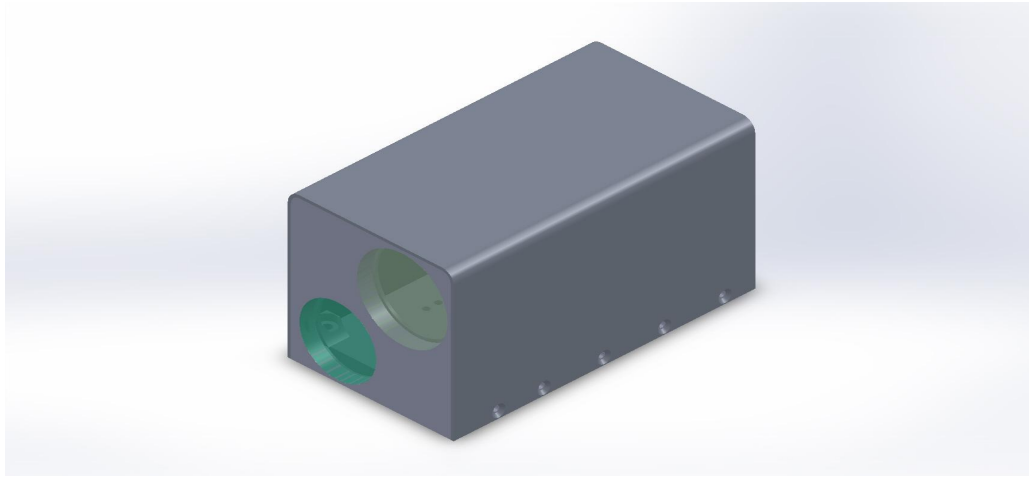
### Benefits

- Compact and lightweight design
- Eyesafe operation
- High repetition rate
- Long distance measurements

### Applications

- Naval, army and airborne FCS (fire control systems)
- Target tracking systems and anti-aircraft systems
- Military surveillance
- Multi-sensor platforms
- For determination of flight altitudes
- To measure the height of airplanes above ground level
- In general for applications of position determination of moving object

## Outline drawing



## Specifications

PARAMETER	VALUE
<b>Range Performance</b>	
Minimum Range	50 m
Maximum Range	20,000 m
Range Reporting Logic	First/Last/All
Target Discrimination	25 m
Range Accuracy	≤ 1 m
Range Increment	± 0.1 m
False Alarm Rate	≤ 1%
<b>Optical</b>	
Wavelength	1535 nm
Energy	10 mJ
Pulse Rate Frequency	10 Hz
Beam Divergence	≤ 1 mrad FW 1/e <sup>2</sup>
Transmitter Aperture	18 mm
Eye Safety	Class 1
Receiver Aperture	30 mm
<b>Mechanical</b>	
Size (L x W x H)	55 mm x 55 mm x 100 mm
Weight	≤ 1000 grams(1Kg)
LRF Tx Boresight to Housing	≤ 1 mrad
LRF Tx Boresight over Temperature	≤ 0.5 mrad
<b>Electrical</b>	
Power	≤ 200W-15V ±0.2V nominal
Connection	9-Pin Molex
Communication	RS-232
Input Signals (3.3V Logic)	Range on Rising Edge
Output Signals (3.3V Logic)	t <sub>0</sub> , pump laser strobe, ready to range
<b>Environmental</b>	
Operating Temperature	-20°C to +50°C
Storage Temperature	-40°C to +71°C

5Km , 10Km, 20Km laser rangefinder can be offered , please enquire if you need.  
It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.