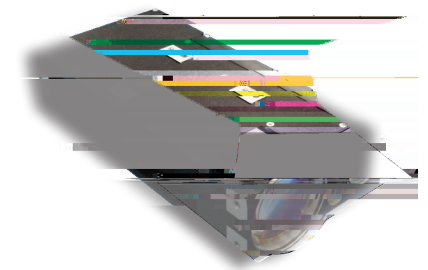


# LASER RANGE FINDER

## Diode-Pumped Technology

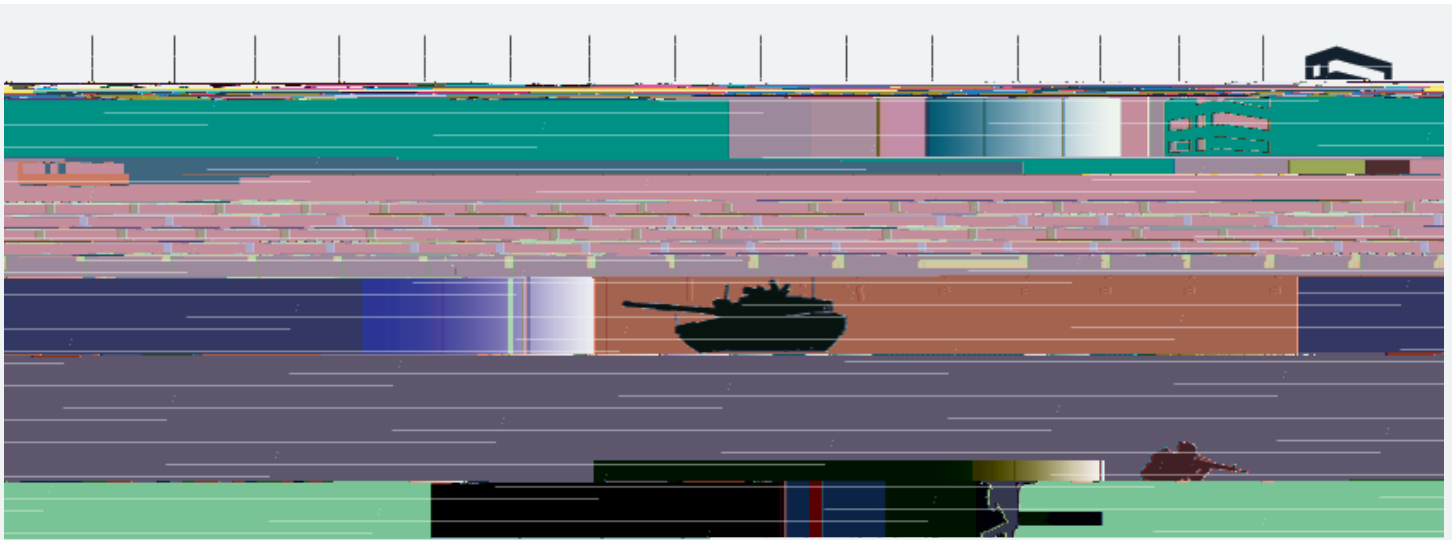
DP-ELRF   MLRF-2B	
<b>System</b>	
Max Range	See Back for Figure 1
Min Range	50 m
Transmitter Boresight Accuracy (relative to nominal emission axis)	$\leq \pm 300 \mu\text{rad}$ (all environments)
Boresight Retention Over Operating Temperature (relative to initial factory alignment)	$\leq \pm 100 \mu\text{rad}$ (all environments)
MTBF	11,000 hours (uninhabited airborne cargo environment @ 40 °C - system powered and firing 25% of time @ 1 Hz Firing Rate) 7,500 hours (composite wheeled environment @ 50 °C - system powered and firing 25% of time @ 0.25 Hz Firing Rate)
<b>Laser</b>	
Wavelength	1535 nm $\pm$ 5
Class	Class 1 IAW ANSI-Z136.1-2007
Pulse Rate	$\leq 2$ Hz
Laser Shot Life	> 1,000,000 Shots
Beam Divergence	Note: 1
Energy Output	Note: 1
Pulse Width	Note: 1
<b>Receiver</b>	
Range Resolution	1 m
Range Accuracy	5 m 2
Range Logic	First/Second/Last
Multi-Target Discrimination	30 m Short Range (< 100 m) 25 m All Other Ranges
Detector Type	Note: 1
Receiver Sensitivity	Note: 1
<b>Boresight Projector</b>	
Wavelength	Visible
Divergence	Between 0.4 to 1.5 $\mu\text{rad}$ (inclusive)
<b>Mechanical</b>	
Weight	< 1020 g (2.25 lbs)
Dimensions	203.2 mm (8.00 in.) x 92.0 mm (3.61 in.) x 53.0 mm (2.09 in.)
Environmental Enclosure	Sealed Transmitter Cavity, Enclosed Electronics and Receiver
<b>Electrical</b>	
Communications Protocol	RS-232 Std (RS-422 and RS-485 available)
Input Voltage	22 VDC to 32 VDC
Power Consumption	< 50 W
<b>Environmental</b>	
Operating Temperature	-30°C (-22°F) to +71°C (159.8°F)
Environmental Standards	MIL-STD-810F and MIL-STD-461F



The Miniature Laser Range Finder (MLRF)-2B is the latest addition to the L3Harris Diode-Pumped Eye-Safe Laser Range Finder product family. Weighing just over 1kg, firing with nominal 3 mJ output energy, optimized beam divergence, an integrated visible Boresight

L3Harris is a global leader in defense technologies and services, L3Harris is an ISO 9001 certified full-service designer and manufacturer of military grade Eye-Safe Laser Range Finder, Laser Designator, and Multi-Function Laser Systems.

NOTE 1: These parameters, together and in combination with the atmospheric and target characteristics shown, provide the user with the achievable range performance shown in Figure 1, as seen below.



## FEATURES

- > Up to 25 km ranging capability, 39.9 km range gate
- > 4.5 mJ nominal energy
- > Total weight < 1020 gm
- > Dimensions 8 in. L X 3.6 in. W X 2.1 in. H
- > Diode-Pumped Erbium: Glass
- > Avalanche Photo Diode Detector (APD)
- > Pulse Repetition Frequency 2 Hz
- > 20 to 32 VDC
- > MIL-STD Tested Environments

Laser Designator / Range Finder

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