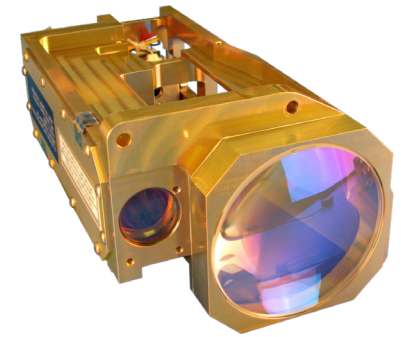




DIODE-PUMPED EYE-SAFE LASER RANGE FINDER

DP-ELRF III

System	
Max Range	See Figure 1
Min Range	50 m
Transmitter Boresight Accuracy (relative to nominal emission axis)	$\leq \pm 1.0$ mrad/axis at ambient
Boresight Retention Over Operating Temperature (relative to initial factory alignment)	$\leq \pm 100$ μ rad (all environments)
MTBF	11,000 hours (uninhabited airborne cargo environment @ 40 °C - system powered and firing 25% of time) 7,500 hours (composite wheeled environment @ 50 °C - system powered and firing 25% of time)
Laser	
Wavelength	1535 nm \pm 5
Class	Class 1 IAW ANSI-Z136.1-2007
Pulse Rate	≤ 2 Hz
Laser Shot Life	> 1,000,000 Shots
Beam Divergence	Note: 1
Energy Output	Note: 1
Pulse Width	Note: 1
Receiver	
Range Resolution	1 m
Range Accuracy	50 to 300 m Target 7 m 1 σ , 301 to 10,000 m Target Range: 4 m 1 σ
Range Logic	First / Second / Last
Multi-Target Discrimination	≥ 25
Detector Type	Note: 1
Receiver Sensitivity	Note: 1
Mechanical	
Weight	≤ 1.25 kg (2.75 lb)
Dimensions	195.8 mm (7.71 in) x 119.9 mm (4.72 in) x 88.4 mm (3.48 in)
Environmental Enclosure	Open frame
Electrical	
Communications Protocol	RS-232 Std (RS-422 and RS-485 available)
Input Voltage	12 VDC to 32 VDC
Power Consumption	≤ 20 W
Environmental	
Operating Temperature	-40 °C (-40 °F) to +71 °C (+159.8 °F)
Environmental Standards	MIL-STD-810F and MIL-STD-461F

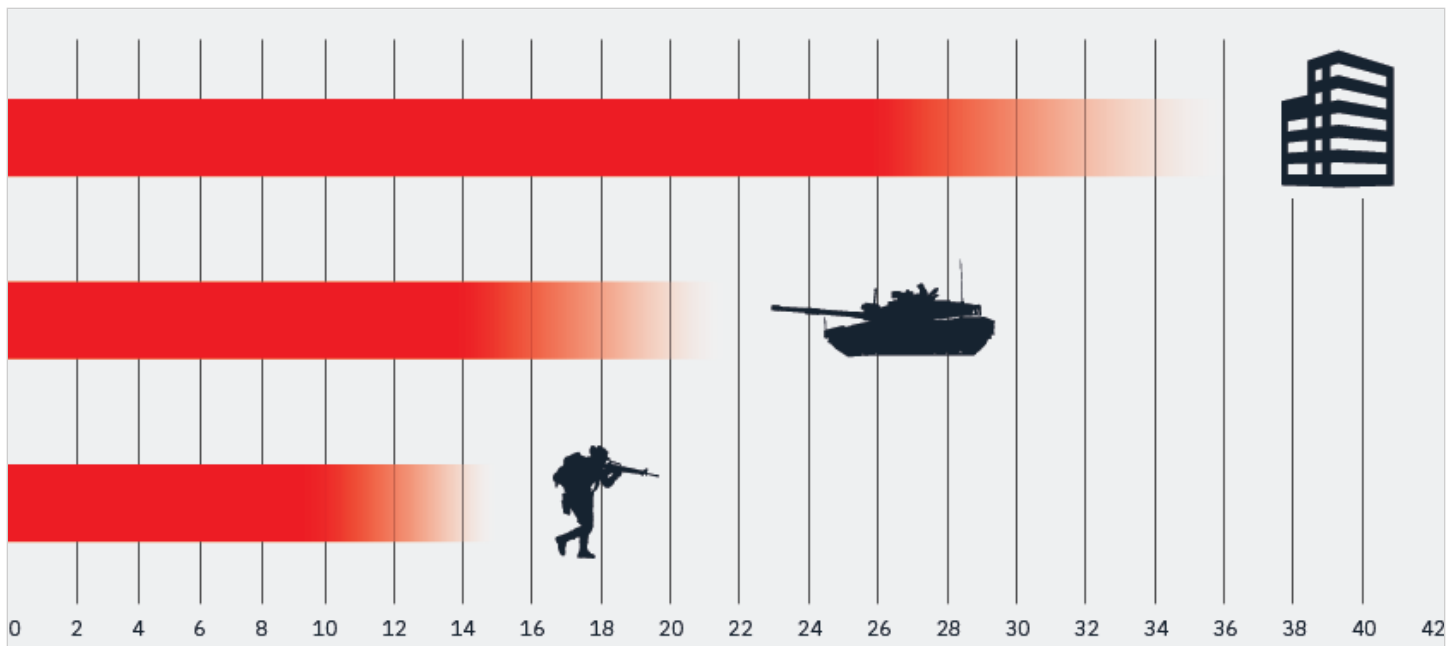


The Diode-Pumped Eye-Safe Laser Range Finder (DP-ELRF) III is a Class 1 eye-safe, long-range laser range finder with improvements that extend capabilities beyond our legacy flash-lamp product line. Improvements to laser beam divergence, laser boresight retention, system shot-life and receiver sensitivity result in superior product performance even in the most demanding operational environments. The improved DP-ELRF III maintains constant Class 1 eye-safe operation and ruggedized environmental hardening.

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 on page 2.

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.

Figure 1: Ranging Performance Using Various Targets (FAR \leq 0.1 %)



PRODUCT OVERVIEW

The DP-ELRF III provides up to 30 km ranging capability, 5 mJ nominal energy, diode-pumped Erbium:Glass, pulse repetition frequency \leq 2 Hz, \leq 450 μ rad beam divergenc, and Avalanche Photo Diode Detector (APD). This laser range finder is ANSI-Z136.1-2007 and IEC 60825-1 Class 1 Eye-Safe and features a single connector interface for power and communication.

Diode-Pumped Eye-Safe Laser Range Finder

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Cleared by DoD/OSR for public release under 15-S-2565 on 9/21/15. Export of this product is regulated by the U.S. Department of State in accordance with guidelines of "International Traffic in Arms Regulations (ITAR)" per Title22, Code of Federal Regulations, Parts 120-130.



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