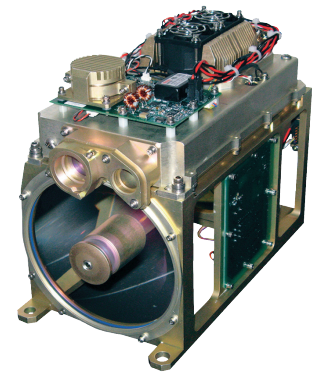




DIODE-PUMPED EYE-SAFE LASER RANGE FINDER

DP-ELRF V

System	
Max Range	See Figure 1
Min Range	50 m
Transmitter Boresight Accuracy (relative to nominal emission axis)	$\leq \pm 200 \mu\text{rad}/\text{axis}$ at ambient
MTBF	1,500 hrs
Laser	
Wavelength	1535 nm \pm 5
Class	Class 1 IAW ANSI-Z136.1-2007 or Class 3R
Pulse Rate	≤ 4 Hz Continuous for no less than 20 minutes
Beam Divergence	Note: 1
Energy Output	Note: 1
Pulse Width	Note: 1
Boresight Projector	
Wavelength	Visible
Divergence	≤ 1.0 mrad
Receiver	
Range Resolution	2 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 m
Detector Type	Note: 1
Receiver Sensitivity	Note: 1
Mechanical	
Weight	≤ 5.22 kg (11.5 lb)
Dimensions	253 mm (9.96 in) x 220.7 mm (8.69 in) x 139.7 mm (5.50 in)
Environmental Enclosure	Open frame
Electrical	
Communications Protocol	RS-422 (RS-232 and RS-485 available)
Input Voltage	12 VDC to 32 VDC
Power Consumption	≤ 20 W
Environmental	
Operating Temperature	-31 °C (-25 °F) to +60 °C (+140 °F)
Environmental Standards	MIL-STD-810F and MIL-STD-461F

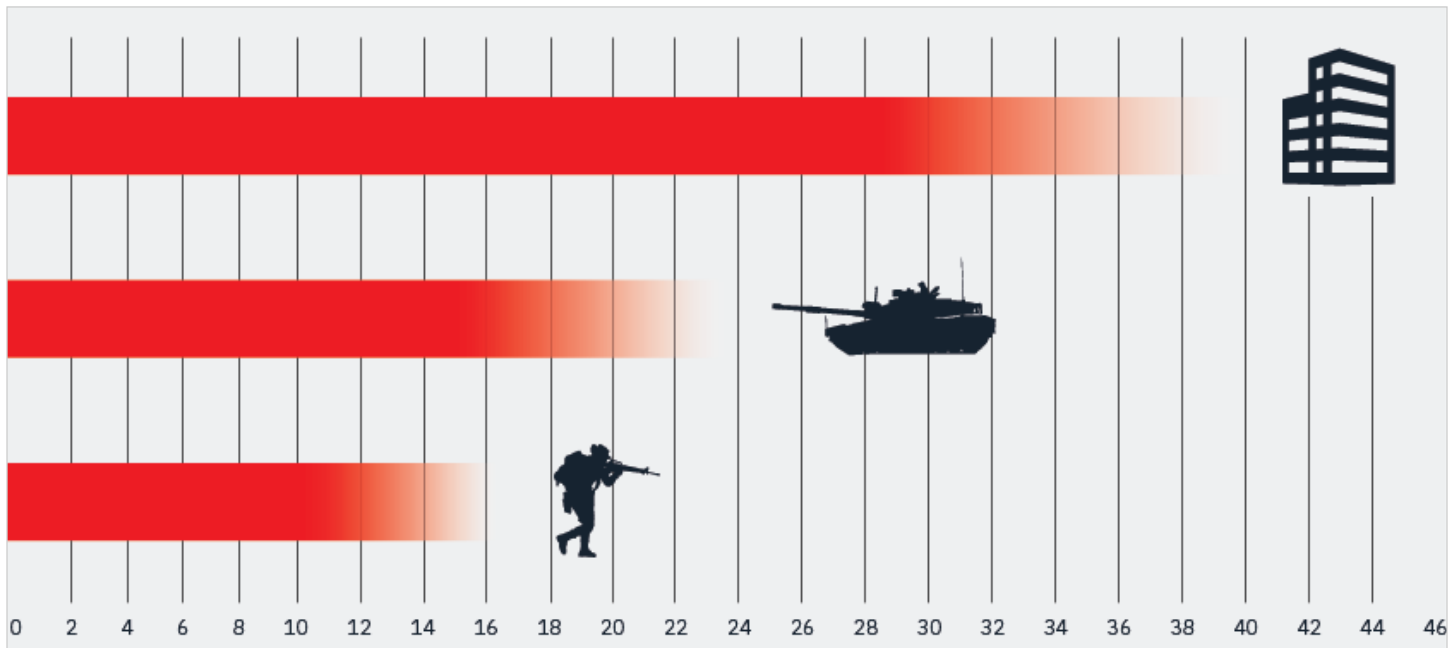


The Diode-Pumped Eye-Safe Laser Range Finder (DP-ELRF) V employs the latest in range finding technology. Using a diode-pumped erbium: glass laser transmitter and a TE-cooled APD receiver, the DP-ELRF V provides high-pulse rate, low-input power requirements, and longer ranging pulses. The low-beam divergence and larger receiver aperture provide for more accurate ranging on smaller targets. Combined with the higher rep rates, the DP-ELRF V is an excellent long-range choice for fire control systems even for small targets, such as missiles while maintaining Class 1 or Class 3R eye safety.

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 shown 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-V provides up to 50 km ranging capability, 3.2 mJ nominal energy, pulse repetition options of 1, 4, or 10 Hz, and TE-cooled Avalanche Photodiode Detector (APD). This laser range finder is ANSI Z136.1-2007 Class 1 or Class 3R Eye-Safe. Providing kinematic-mounting interface for reliable boresight retention, it also has a single-connector interface for power and communication.

Diode-Pumped Eye-Safe Laser Range Finder

© 2019 L3Harris Technologies, Inc. | 06/2019

Cleared by DoD/OSR for public release under 15-S-2585 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.



1025 W. NASA Boulevard
Melbourne, FL 32919
t 407 295 5878 | f 407 770 2984
Marketing.ALST@L3Harris.com