Eyesafe Laser Rangefinder (ELRF)





PRODUCT OVERVIEW

The ELRF-2 is a Class 1 eyesafe, long-range laser rangefinder with an APD receiver suitable for a wide variety of applications. With options such as lower beam divergence for smaller targets or increased range resolution, the ELRF-2 can be configured for a specific application. The modularity of the unit along with L-3 ALST's engineering customization capability allows the ELRF-2 to be fitted to specific customers requirements.

FEATURES

- 20 km ranging capability
- Optional 1 Hz rep rate
- Avalanche Photodiode Detector (APD)
- 1.0 mrad beam divergence standard, 0.5 mrad optional
- ANSI Z136.1-2007 and EN 60825-1 Class 1 eyesafe
- Kinematic-mounting interface for reliable boresight retention
- Single-connector interface for power and communication
- · Modular configuration of components



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SPECIFICATIONS

Laser Type	Erbium glass	
Wavelength	1.54 microns	
Pulse Rate	12 ppm (1 Hz optional)	
Max/Min Range*	20 km / 50 m	
Range Resolution	± 5m (± 2m optional)	
Receiver Aperture	40 mm	
Beam Divergence	0.5 mrad	
Detector Type	APD	
Communication Interface Options	RS-232, RS-422, RS-485	
Module Dimensions	2M: 228 mm x 75 mm x 55 mm 2MC: 178 mm x 76 mm x 76 mm	
Housing Dimensions	2M: 280 mm x 117 mm x 71 mm 2MC: 217 mm x 121 mm x 91 mm	
Weight	0.85 kg (w/o housing)	

^{*} Maximum range achievable under ideal atmospheric and target conditions. Actual range is dependent upon atmospheric conditions, target size and reflectivity.

OPTIONS FOR ELRF-2

Housing Option (H): Heavy-duty painted aluminum housing includes kinematic mounting features, sealed, visible light blocking window, sealed connector, and nitrogen purge valve.

High-Pulse Rate Option (HPR): Continuous operation nominally up to three minutes at one hertz pulse rate. No increase in size or weight.

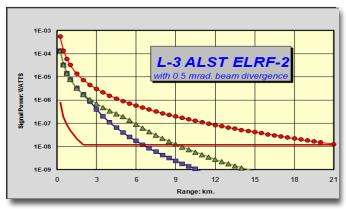
Non-Volatile Shots Counter Option (SC-1): The number of times the flashlamp has fired is recorded and stored in a non-volatile memory. This number is accessed via the serial interface.

High-Range Resolution Option (RC-2): ± 2 meters range resolution.

0.5 milliradian Output Telescope Option (HB.5): 4-element beam expansion telescope reduces beam divergence to 0.5 milliradians. Recommended for long range applications or ground-to-air ranging against small targets.

Series Software Option (SW-1): Supports operation via any Windows equipped computer. All controls, installed options, and range data are accessed via the user-friendly control window with mouse selected command buttons and check boxes. One time license fee includes use with unlimited number of units.

Sighting Telescope (ST-1): Variable power riflescope with adjustable focus is mounted to housing and boresighted to laser rangefinder optical axis.



LEGEND	Range Performance
1-square meter, 10% R, 23-km. visibility	6.5 km
TANK, 10% R, 23-km. visibility	9.1 km
Large Target, 40% R, 30-km. visibility	20.0 km
Minimum ADD data ation limit	

Minimum APD detection limit

ABOUT L-3 ALST

Part of L-3 Communications, a global leader in defense technologies and services, Advanced Laser Systems Technology (ALST) is a full service designer and manufacturer of military grade Eyesafe Laser Rangefinder, Laser Designator, and Multi-Function Laser systems.

An ISO 9001 certified quality organization, L-3 ALST has a quarter century of past performance providing system integrators and primes with open frame OEM modules and housed LRUs (line replaceable units) in a variety of configurations.

L-3 ALST's products are listed under category XII(b) of the United States Munitions List. International Traffic In Arms Regulations (ITAR) requires a valid export license prior to technical or hardware shipments or transmissions of information.



Warrior Systems

ALST_ELRF-2_12142012_v3

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