

ELRF-1 FLASH-LAMP EYE-SAFE LASER RANGE FINDER

System	
Laser Type	Erbium glass
Wavelength	1.54 microns
Pulse Rate	12 ppm (1 Hz optional)
Max/Min Range*	10 m / 50 m
Range Resolution	± 5 (± 2 optional)
Receiver Aperture	40 mm
Beam Divergence	1.0 mrad (0.5 mrad optional)
Detector Type	PIN
Communication Interface Options	RS-232, RS-422, RS-485
Module Dimensions	1M: 228 mm x 75 mm x 55 mm 1MC: 178 mm x 76 mm x 75 mm
Housing Dimensions	1M: 280 mm x 117 mm x 71 mm 1MC: 217 mm x 121 mm x 91 mm
Weight	0.85 kg (w/o housing)

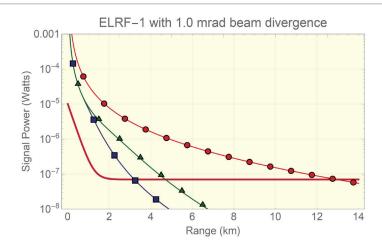
^{*}Maximum range achievable under ideal atmospheric and target conditions. Actual range is dependent upon atmospheric conditions, target size and reflectivity.



The ELRF-1 Flash-Lamp Eye-Safe Laser Range Finder is a Class 1 eye-safe, long-range laser range finder with PIN receiver suitable for a wide range of applications. With options such as lower beam divergence for smaller targets or increased range resolution for higher accuracy, the ELRF-1 can be configured for a specific application. The modularity of the unit along with L3Harris' engineering customization capability allows the ELRF-1 to be fitted to specific customer requirements.

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 finders, laser designators and multi-function laser systems.

The ELRF-1 provides up to 10 km ranging capability, has an optional 1 Hz rep rate, PIN photodiode detector, 1.0 mrad beam divergence standard and 0.5 mrad optional. This product is ANSI Z136.1-2007 and EN 60825-1 Class 1 eye-safe. It includes a kinematic-mounting interface for reliable boresight retention and a single-connector interface for power and communication.



LEGEND	Range Performance	
■ 1-square meter, 10% R, 23 km visibility	3.2 km	
△ TANK, 10% R, 23 km visibility	4.7 km	
Large Target, 40% R, 30 km visibility	12.9 km	

OPTIONS:

- **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 1 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** (R2): ± 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 Option** (ST-1): Variable power riflescope with adjustable focus is mounted to housing and boresighted to laser range finder optical axis.

Flash-Lamp Eye-Safe Laser Range Finder (ELRF-1)

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