

LRF100

Miniaturised Precision Laser Range Finder Modules for Enhancement of OEM Electro Optic Sensor Capability



Main Advantages & Features

- Compact, just 96mm x 50mm x 32mm
- Lightweight <110g
- Easily integrated
- Versatile mechanical mounting arrangement
- Rugged design
- Measurement range <8m to 4000m
- High accuracy
- Eye safe 1550nm wavelength
- Multiple object capability
- LVTTTL communications
- 3.3Vdc power supply

Applications

- Homeland security
- Multifunction image sensors
- Civil engineering
- Automotive & industrial metrology
- Object tracking



Options

- Windows PC Starter kit
- Integrated day camera
- Integrated digital compass module
- Customer specific mounting brackets

LRF100

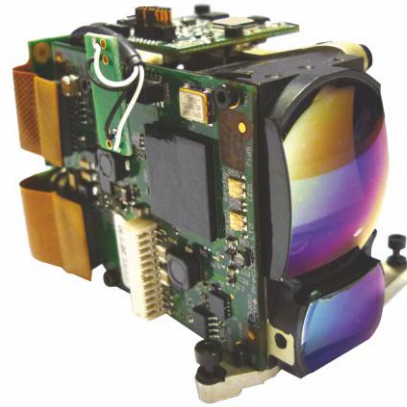
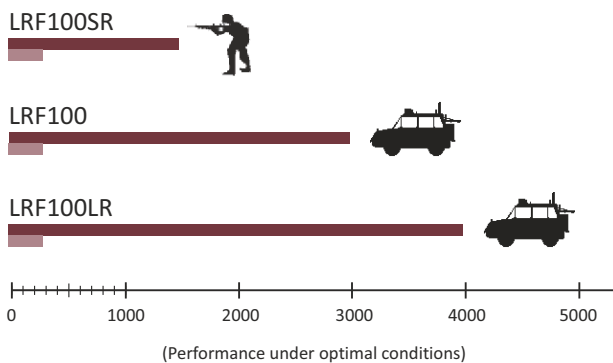
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Outline Specification

Laser Safety	
-LRF100SR	Class 1 Eye Safe
-LRF100, LRF100LR	Class 1m Eye Safe
Wavelength	1550nm
Overall size (nominal)*	96mm x 50mm x 32mm
Weight (approx)*	110g
Measurement accuracy (Subject 300m or closer)	1m (1 σ) 
Measurement accuracy (Subject beyond 300m)	5m (1 σ) 
Range performance (optimal conditions)	
-LRF100SR	Min<8m, Max 1500m
-LRF100	Min<8m, Max 3000m
-LRF100LR	Min<8m, Max 4000m
Mechanical interface	Tapped mounting points on the front and side of module
Multiple object capability	Yes
Connectivity	LVTTTL
Environmentally sealed	NA Open chassis design
Operating temperature	-30°C to 55°C
Operating voltage	3.3Vdc, ripple <50mVpp

* depends on application and configuration

Range Performance (Meters)



The LRF100 compact, lightweight Laser Range Finder module has been designed to provide a cost effective solution for OEMs wishing to integrate a laser rangefinder capability into existing or new design sensors and systems.

LRF100 modules are particularly suited to hand held and portable applications due to their light weight, size and enhanced range performance.

Manufactured from a precision machined optical bench the LRF100 has been optimised for stable operation over the wide temperature range experienced in homeland security and other demanding applications.

As standard, the LRF100 operates in an auto-exposure mode, adapting the measurement time to the strength of the returned signal optimising measurement accuracy for shorter ranges. Alternative trade-offs can be provided to suit customer specific applications.



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