

LRF1500H · 905 NM

SHORT-RANGE DToF

LRF1500H

LASER CLASS

CLASS 1

IEC 60825-1

A 20 g, 33 × 34 × 18 mm 1.5 km DToF LiDAR for UAV pods, traffic safety and security monitoring — 0.05–1,500 m with adaptive 1 kHz / 50 Hz output that auto-switches on echo strength.

MAX RANGE	ACCURACY	WEIGHT	INTERFACE
0.05–1,500 m (90% refl.)	±10 cm (<10 m); 1% (≥10 m)	20 ± 2 g	UART / I ² C

TECHNICAL SPECIFICATIONS

FULL SHEET

Laser wavelength	905 nm
Ranging range	0.05–1,500 m (90% refl.) · 0.05–300 m (10% refl.)
Measurement frequency	1 kHz or 50 Hz – switches automatically to match echo strength
Ranging accuracy	±10 cm (<10 m) · 1% (≥10 m)
Repeatability	±5 cm (<10 m) · ±100 cm @ 1,500 m
Ambient light immunity	100 kLux
Laser safety class	Class 1
Field of view	≈ 4 mrad
Supply voltage	9–36 V DC
Peak current	100 mA
Average current	55 mA
Average power consumption	1.2 W
Interface	UART / I ² C
Dimensions	33 × 34 × 18 mm
Weight	20 ± 2 g
Operating temperature	-20 to +60 °C
Wire specification	1.25 mm, 5-pin, 50 cm stranded wires
Customization	Available in appearance / structure / output protocol



INTERFACE

UART-TTL

PIN	SIGNAL	DESCRIPTION
1	9–36V	External power +
2	Power GND	External power -
3	Port GND	Ground
4	TX	Host RX
5	RX	Host TX

APPLICATION FIT

- UAV PODS & EO/IR PAYLOADS
- TRAFFIC SAFETY EARLY WARNING
- SECURITY MONITORING

Standard 8-byte UART frame (0x55 0xAA header, function code, 4 data bytes, checksum); distance returned ×10 for a one-decimal reading. Full integration manual ships with samples.