

ULTI  
SENSE.

# LRF 5020

Datasheet



**A lightweight and compact diode laser rangefinder. The robust construction allows a wide range of applications.**

Thanks to the unique beamshaper technology the LRF 5020 provides a low divergence laser beam resulting in precise measurement results and a power effective operation in bad conditions. A stable, mechanical structure allows the module to be exposed to harsh environment conditions such as extreme temperatures, shock and vibration. This makes this module ideal for use in handheld devices and also remote weapon stations.

## PRODUCT HIGHLIGHTS

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Unique beamshaper technology

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Optimal beam divergence for easy target acquisition

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Invisible even for NV goggles

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Weapon shock proof up to 1,500 g

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Small and lightweight 4.5km rangefinder

## APPLICATIONS

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Remote weapon stations

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Handheld devices

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Observation and surveillance systems

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Coastguard and border protection

LRF 5020  
**TECHNICAL DATA**

### PERFORMANCE

Range performance on beamfilling target Reflectivity 60%, Observer visibility 10 km, typical	4,500 m
Range performance (NATO target) Target size 2.3×2.3 m, Reflectivity 30%, Observer visibility 10 km, typical	2,500 m
Range performance on man size target Target size 1×1 m, Reflectivity 10%, Observer visibility 10 km, typical	1,400 m
Accuracy 50 – 1,500 m (1 $\sigma$ )	±3 m
Accuracy >1,500 m (1 $\sigma$ )	±5 m
Single measurement repetition rate	0.25 Hz
High repetition rate	1 Hz
Multiple target detection	up to 3 targets
Wavelength	1,550 nm
Divergence typical	1.0×1.6 mrad
Eye safety per IEC 60825-1	Class 1

### ENVIRONMENTAL CHARACTERISTICS

Operating temperature range	-35° C to +55° C
Storage temperature range	-40° C to +85° C
Shock (half sine) at 1 ms in z-direction (line of sight)	1,500 g
Shock (half sine) at 1 ms in x- and y-direction	500 g

### PHYSICAL CHARACTERISTICS

Weight	120 g
Dimensions (length/width/height)	100×50×35 mm

### INTERFACES

Hardware interface	6 pin ERNI MiniBridge
Communication interface	RS232
Power supply	4 V – 12 V
Mechanical interface	3 threaded holes, 2 positioning holes

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