

3km Micro Laser Ranging Module

LSP-LRS-0310F

Product Description:

The compact 3Km laser ranging module is a new product launched by Lumispot Tech, featuring an independently developed 1535nm glass laser and utilizing a TOF+TDC scheme that allows for vehicle ranging up to 3km with accuracy better than 1m. The product is designed with dimensions of 48 x 21 x 31mm, weighs less than 35g, and includes a side-mounting feature.

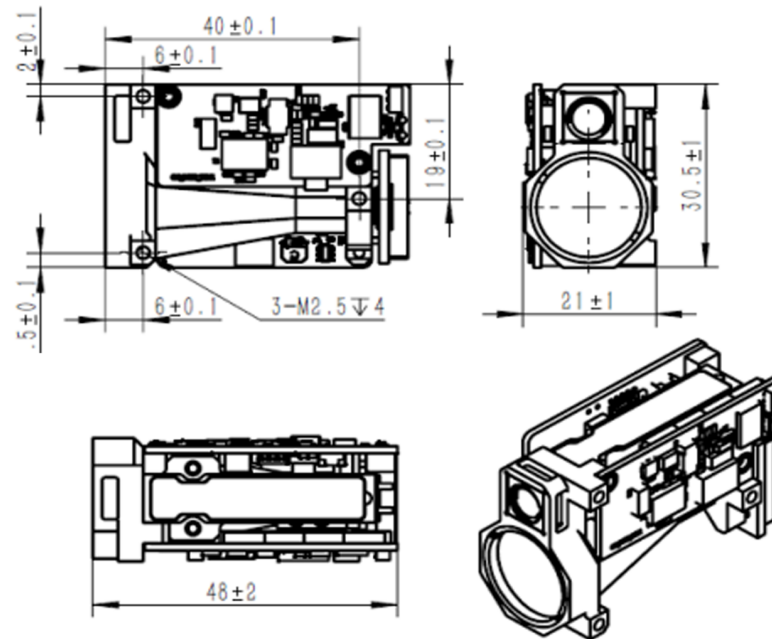


- Laser Ranging
- Targeting

Technical Data

Parameters	Unit	LSP-LRS-0310F
Wavelength	nm	1535±5
Operating range	m	3,000m@objective: 2.3*4.6m;
Laser divergence angle	mrad	≤ 0.6
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	1
Minimum range	m	<20
Range resolution	m	≤30(Multi-target)
Voltage supply	V	DC6 ~ 36
Weight	g	≤ 35
Power consumption	W	“Average ≤1W(@1Hz); Peak ≤5W”
Dimension	mm	≤48*21*31
Working temperature	°C	-40 ~ +65
Communication interface		TTL

Product Dimension



Size in mm

Special Note

1. The laser emitted by the rangefinder is 1535nm for human eye safety laser, although it is a human eye safety wavelength, but it is recommended not to look directly at the laser;
2. When adjusting the parallelism of the optical axis, the receiving lens must be blocked, otherwise the detector will be permanently damaged due to excessive echo;
3. The measuring module is non-airtight, and must ensure that the relative humidity of the use environment is less than 80%, and ensure that the use of the environment is clean and sanitary, so as not to damage the laser;
4. The range measurement of the rangefinder is related to the atmospheric visibility and the nature of the target, and the range measurement will be reduced in the case of fog, rain and wind sand. Green leaf clusters, white walls, exposed limestone and other targets have better reflectivity, which can increase the measurement range. In addition, when the Angle of the target to the laser beam increases, the measurement range will be reduced.
5. It is strictly forbidden to emit laser to strong reflection targets such as glass and white walls within 20 meters, so as to avoid too strong echo, resulting in damage to the APD detector;
6. Do not plug and unplug the cable in the energized state;
7. Ensure that the power supply polarity connection is correct, otherwise it will cause permanent damage to the equipment;

