

3D 360° Multi-Line LiDAR LR-16F 3D LiDAR Sensor



- $\pm 15^\circ$ (FOV) @ 360° full angle scan, measuring range: 100m
- More compact size: 97 (D) \times 84.2 (H) (mm)
- Innovative optical design, high manufacturability
- High stability, excellent accuracy in extreme high and low temperature
- 310k/s point cloud density with azimuth, distance, reactivity data
- Certification: FCC, EMC, CE, RoHS, REACH
- Accept customization: number of wires (4~32), wiring method, explosion-proof, protection level
- IP66 Protection Level



Robotics



Security



Industrial



Intelligent
logistics



Mapping

CE FC

LR-16F 3D LiDAR Sensor



Specification table

Item	Unit	Specification
Laser wavelength	nm	905
Laser safety level		Class 1(IEC 60825-1:2014)
Laser channels	mrad	16
Returns		Single(Strongest,first)
Field of View(Vertical)	°	-15°~+15°
Field of View(horizontal)	°	360
Beam divergence	mrad	longitudinal 9 mrad transversal 3 mrad
Spot size@10M((1/e ²))		90mm*34mm
Angle resolution (vertical)	°	2° (No 0° Line)±0.1°
Angle resolution (horizontal)	°	0.18°±10%@10Hz
Scanning frequency	Hz	5Hz or 10Hz
Distance resolution		2
Accuracy	mm	Absolute Accuracy [°] ±5cm Repeat accuracy [°] ±3cm
Measurement range	m	0.5~45m@10% re_ectivity 0.5~100m@80% re_ectivity 0.5~100m@re_ector
Signal strength		0-255
Ethernet connection		100Mbps Ethernet
UDP packets contain		- Distances - Calibrated Re_ectivities - Rotation Angles - Synchronized Time Stamps
Scanning rate	pts	~310,000 pts
Connection		12 pin A-Coded Socket(With Interface Box)
Mechanical dimensions	mm	97×84.2
Power consumption @25℃	W	°10
Weight	g	~800g
Degree of protection		IP66
Operating temperature	℃	-10~50
Storage temperature	℃	-20~60
Air humidity	RH	95% (non-condensing)
Ambient light limit	LUX	< 80000
Operating voltage	VDC	12~30
Mounting		Bottom
EMC		IEC 61000-6-2:2016-08 / IEC 61000-6-3:2006-07
Vibration resistance		IEC 60068-2-6:2007
Shock resistance		IEC 60068-2-27:2008
Basic software		OLAMViewer ROS driver
GPS		YES

Outline and mounting

