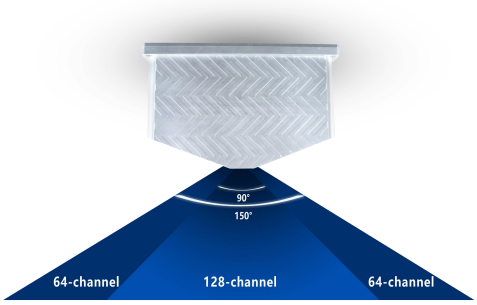
CH Series 128-Channel LiDAR

Abstract

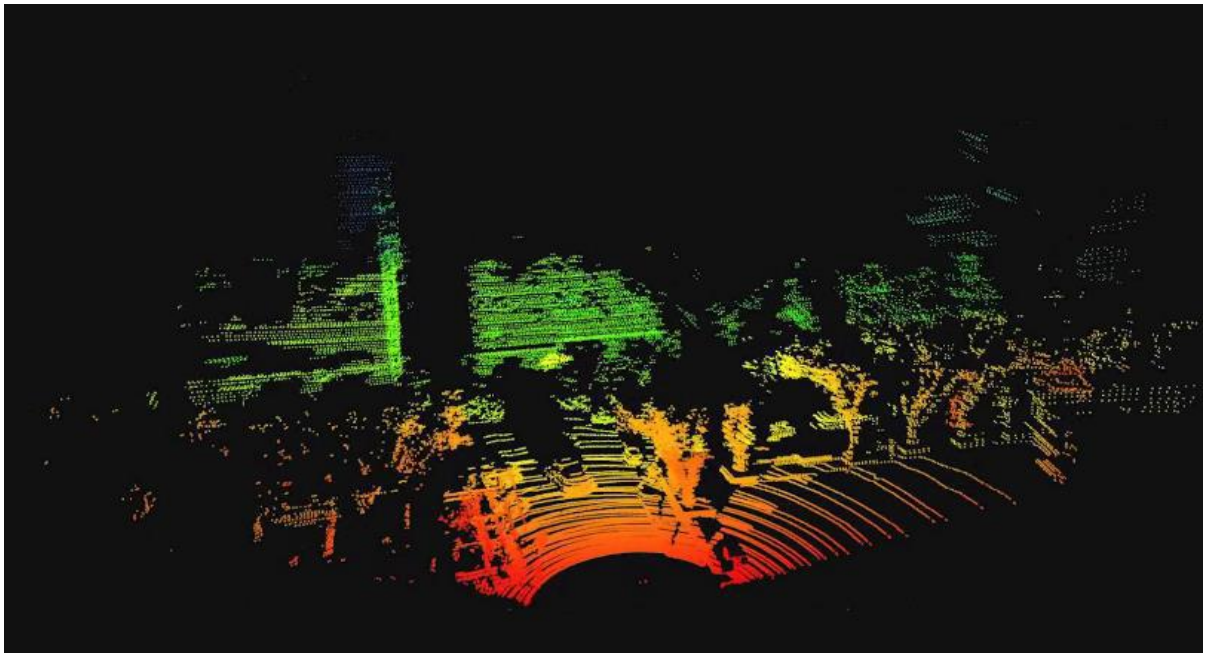
The CH Series 128-Channel LiDAR is designed for Automotive Grade Standards to meet demands of L4 and L5 autonomous cars. With a hybrid solid-state structure. The horizontal FOV is 150°. Its detection range is up to 300m, and the distance accuracy is ±2cm, which can work with high-speed, low-speed cars and other scenarios.

Features

- Long range, high density, rich point-cloud
- Automotive Grade design, stable structure and lower power consumption
- Mass production, high cost-effective



Demo



Specifications

Model		CH128
Channel		128
Measurement Technique		Time of Flight (TOF)
Wave Length		905nm
Classification		Class 1 Eye-safe/ IEC 60825-1:2007 & 2014
Measurement Range	Typical	100m / 150m / 200m （Reflectivity 20%）
	Min	90m / 135m / 185m （Reflectivity 20%）
Ranging Accuracy		±5cm（0.5m ~ 10m），±2cm（10m ~ 200m)
Data Points Generated		415,000 points per second
Rotation Rate		5 ~ 20Hz
Field of View (FOV)	Horizontal	150°
	Vertical	-17°~ 14.8°
Angular Resolution	Horizontal	5Hz: 0.18°/ 10Hz: 0.36°/ 20Hz: 0.72°
	Vertical	Vertical angle resolution between 0 ° ~ 0.84 °, with a minimum of 0.23 ° in the middle and a maximum of 0.25 °
Operating Voltage		9V~ 36VDC
Operating Temperature		-40℃ ~ 85℃
Communication Interface		1000M Ethernet，PPS
Power Consumption		15W
Shock Test		500m/sec^2，last11ms
Vibration		5Hz-2000Hz，3G rms
IP		IP 67
Weight		2.5kg
Dimension（L·W·H）		207 * 125 * 142mm