

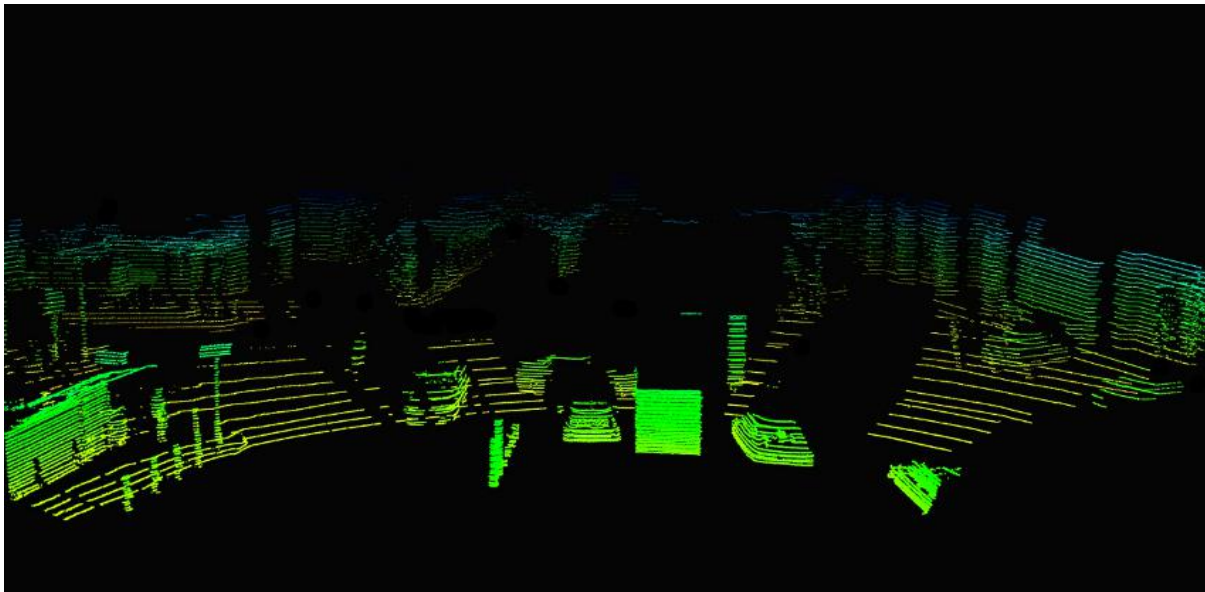
CH Series 32/16-Channel LiDAR



Abstract

CH Series 32 / 16 channel LiDAR is designed for Automotive Grade Standards to meet demands of L4 and L5 autonomous cars. With a hybrid solid-state structure, its measurement range is up to 300 m(CH32 / 16), and the ranging accuracy is $\pm 2\text{cm}$, with 120° horizontal FOV, measuring rate up to 426k pts/s(CH32 / 64), 213k pts/s(CH16), which can work with high-speed, low-speed cars and other scenarios.

Demo



Specifications

Model		CH32	CH16
Channel		32	16
Measurement Technique		Time of Flight (TOF)	
Wave length		905nm	
Laser Classification		Class 1 Eye-safe / IEC 60825-1:2007 & 2014	
Measurement Range (Standard)	Typical	100m / 150m / 200m (Reflectivity 20%)	
	Min	90m / 135m / 180m (Reflectivity 20%)	
	Accuracy	±2cm (0.5m ~ 200m)	
Measurement Range (Enhanced)	Typical	200m (Reflectivity 10%) / 300m (Reflectivity 70%)	
	Min	180m (Reflectivity 10%) / 270m (Reflectivity 70%)	
	Accuracy	±3cm (0.5m ~ 300m)	
Data Points Generated		426,000 points per second	213,000 points per second
Rotation Rate		5 ~ 20Hz	
Field of View (FOV)	Horizontal	120°	
	Vertical	-6.67°~ 4.58°	-4°~ 2°
Angular Resolution	Horizontal	200m: 5Hz: 0.045° / 10Hz: 0.09° / 20Hz: 0.18° 300m: 5Hz: 0.075° / 10Hz: 0.14° / 20Hz: 0.27°	
	Vertical	Vertical angle resolution between 0 ~ 0.81 °, minimum 0.09 ° in the middle and a maximum of 0.47 °	
Operating Voltage		9V~ 36VDC	
Operating Temperature		-40°C ~ 85°C	
Communication Interface		100M Ethernet , PPS	
Power Consumption		10 W	9 W
Shock Test		500m/sec ² , last11ms	
Vibration		5Hz-2000Hz , 3G rms	
IP		IP 67	
Weight		1.5kg	
Dimension (L·W·H)		155 * 107.5 * 90mm	