

# C-Fans-128

Navigation Obstacle Avoidance LiDAR

## Product introduction

The C-Fans-128 is a high-resolution lidar that provides navigation and obstacle avoidance for autonomous vehicles through real-time 3D imaging with an update frequency of 20-80 Hz.

Compared with other solid-state lidar, the C-Fans-128 has a larger field of view (150 ° horizontal), a longer range (200 m@10% reflectivity) and a higher resolution.

The C-Fans-128 uses a semiconductor laser, a photoelectric sensor, 3 signal processing chips, and a solid-state laser transceiver module, which has the advantages of low cost, small size, low power consumption, high reliability and strong environmental adaptability.

The C-Fans-128 lidar has been tested for vibration, fatigue, high and low temperature, waterproofing, electromagnetic compatibility and other reliability criteria. C-Fans-128 has been tested in a certified laboratory, meets the Class 1 human eye safety standard, and has received a radiation safety certificate issued by FDA of USA.

SureStar has obtained IATF 16949 automotive industry quality management system compliance certification, meaning that product quality in the development and production process is fully guaranteed.



### Blend in with the car

Full integration with vehicle exterior by concealed mounting

## Product features



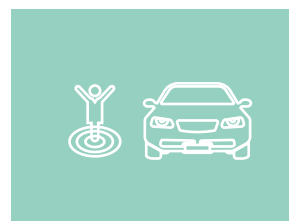
### Long range

Maximum range >200 m



### Broad FOV

150° x 30°



### High resolution

Vertical resolution <0.25°

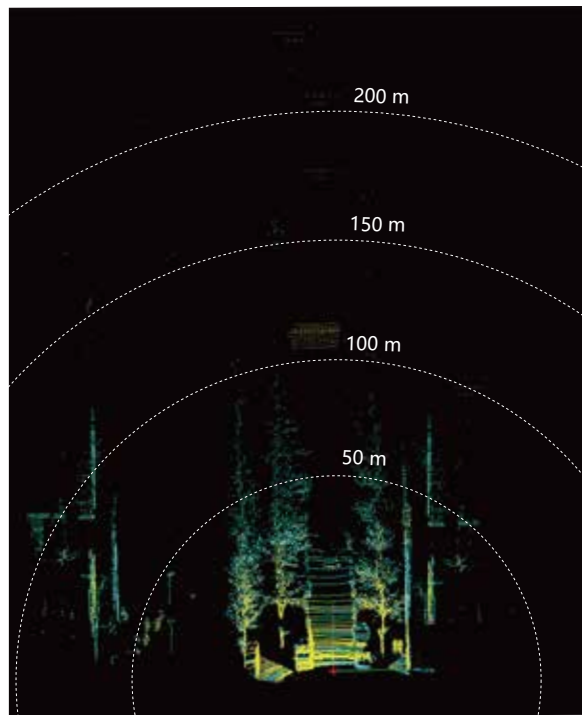


### High reliability

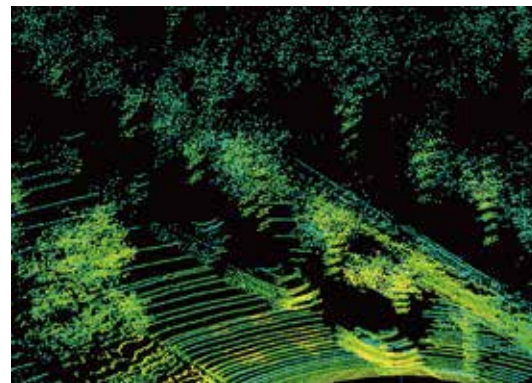
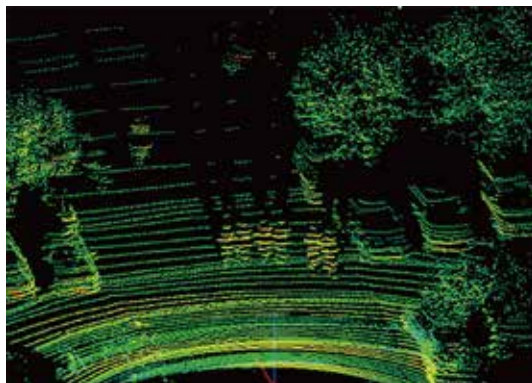
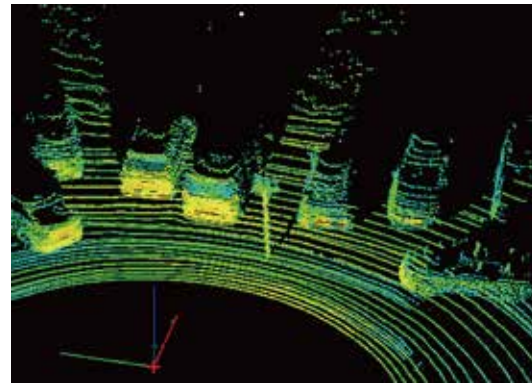
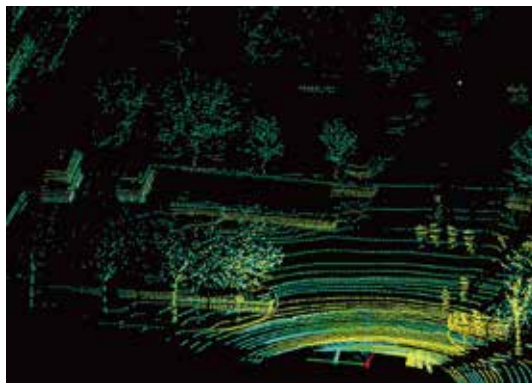
Continuous operation time >200 h

## Product specifications

Wavelength	905 nm
Laser class	Class 1
Pulse frequency	640 kHz
Echo mode	2 echoes
Intensity	8 bit/12 bit
Vertical FOV	30° ( 15° ~ -15° )
Vertical resolution	0.25°
Horizontal FOV	150°
Angular resolution	0.15°
Max. range	>200 m
Accuracy	2 cm
Scan rate	20-80 Hz
Interface	Ethernet, PPS
Weight	1.4 kg
Power supply	9 ~ 36 VDC
Operating temperature	-40°C ~ +85°C
Power consumption	≤ 12 W
Size (mm)	156 x 100 x 88
Protection class	IP67



## Point cloud



C-Fans-128 navigation LiDAR can precisely detect vehicles, pedestrians and other things in the scene.