



E1

High Performance Automotive-grade
Solid-state LiDAR with RoboSense-developed Chips

120°(H) x 90°(V)
FOV

10Hz / 20Hz / 30Hz
Refresh Rate

30 m@10%
Range

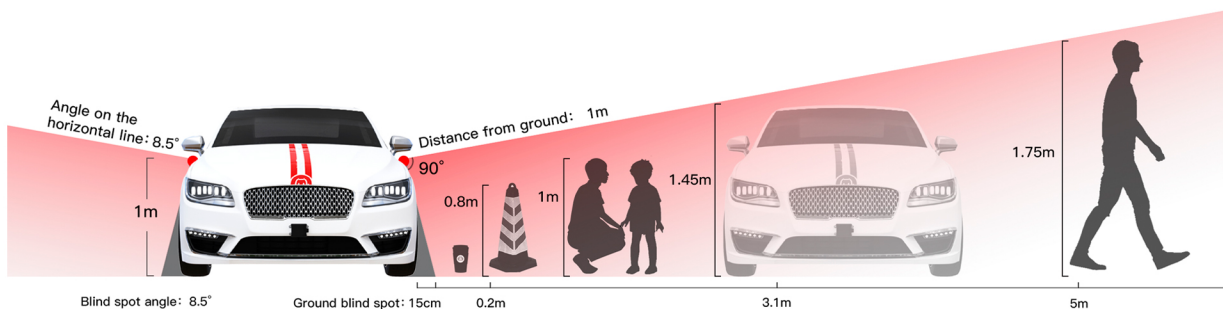
E1 is designed for factory-installed mass production. It adopts RoboSense fully autonomous and controllable chip system, with extreme architecture and compact size.

E1 has an ultra-wide FOV of 120°x90°. At the same time, it also provides an ultra-high refresh rate up to 30Hz, and a stronger ranging capability of 30m@10%, which is accurately adapt to the needs of full-scene blind-filling perception. By matching with the M series, the optimal LiDAR combination can fully cover various blind scenarios and meet the safety perception requirements of intelligent driving from ADAS to L4 in all scenarios.

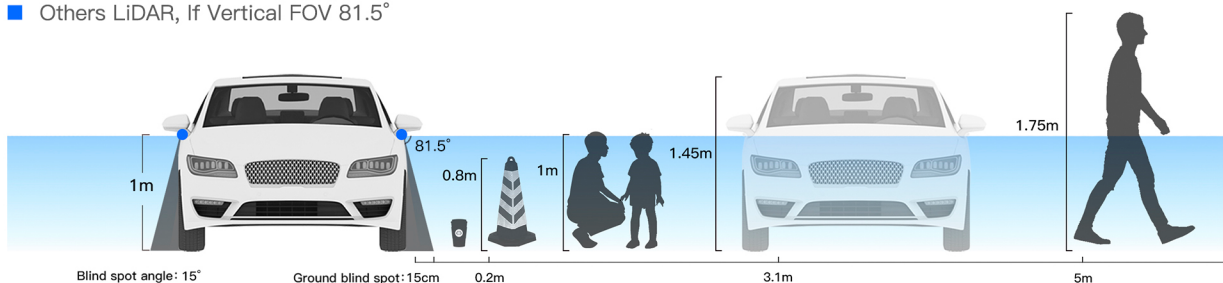
Product Advantages

「90° Vertical FOV, Ideally balance ground blind area reduction and lateral wide-range perception」

■ E1



- Others LiDAR, If Vertical FOV 81.5°



RoboSense / Suteng Innovation Technology Co., Ltd.

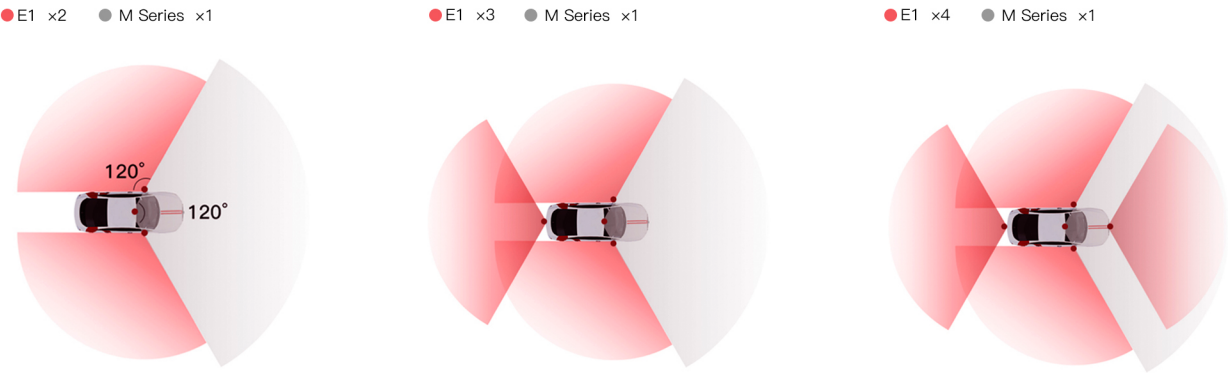
RoboSense Global Headquarters – Building 9, Block 2, Zhongguan Honghualing Industry Southern District, 1213 Liuxian Avenue, Taoyuan Street, Nanshan District, Shenzhen, China



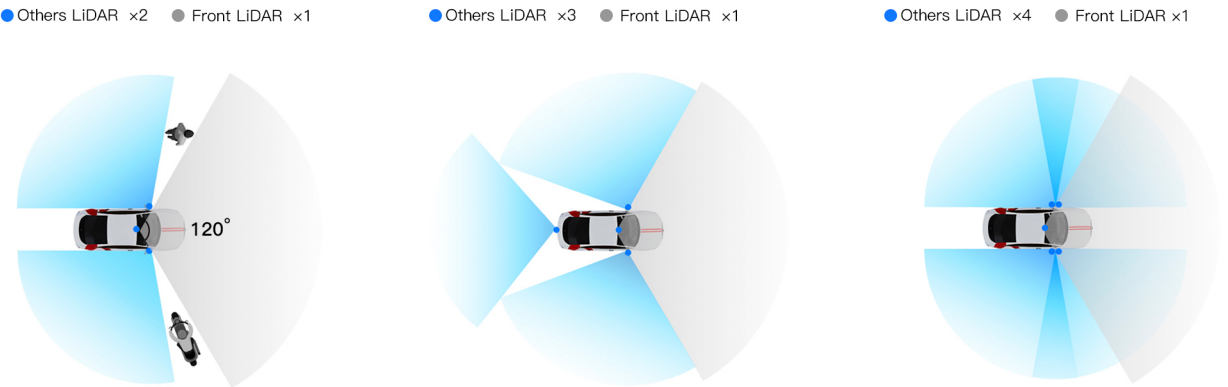
RoboSense

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「Horizontal FOV 120°, the optimal deployment solutions」

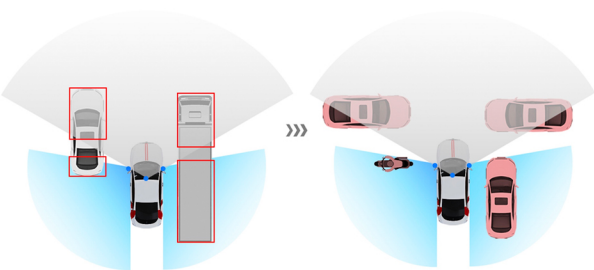


「Horizontal FOV<120°, the deployment solutions have blind spots and mistake」



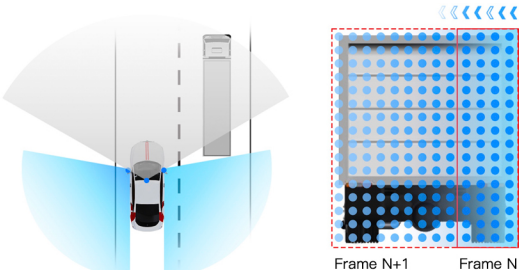
Mistake 1:

「Vehicles traveling in the same direction are mistakenly detected as two obstacles with uncertain state, resulting in frequent braking」



Mistake 2:

「Misjudging the vehicle in front as an obstacle cutting-in at a high speed when overtaking, causing emergency braking」



Sensor			
Laser Safety	Class 1 eye safe	FOV	120°(H)×90°(V)
Range ¹	75m (30m@10% NIST)	Refresh Rate	10Hz / 20Hz / 30Hz
Blind Spot	≤0.1m	Operating Temperature ³	−40°C ~ + 85°C
Range Accuracy (Typical) ²	5cm	Storage Temperature	−40°C ~ + 105°C

* The following data is only for mass-produced products. Any samples, testing machines and other non-mass-produced versions may not be referred to this specification. If you have any questions, please contact RoboSense sales.

1. The detection range is measured under 100 klux light. The range performance is dependent on circumstantial factors, including temperature, range, target reflectivity and other variables.

2. The measurement target of accuracy is a 50% NIST diffuse reflectance target under 100 klux light. The test performance is dependent on circumstantial factors, including temperature, range, target reflectivity and other variables.

3. The operation temperature is depending on circumstance factors, not only sun load and air flow but also including other uncontrollable factors.