Specification

R350

(V2.0)

Product introduction

Radar Obstacle Avoidance System R350 uses 77Ghz millimeter waves to detect objects, vehicles, pedestrians and other obstacles, and issues early warnings to reduce the risk of collision. The R350 has a detection distance of up to 40 meters. It can set three-level alarms based on the distance through different levels of sound and light alarm reminders. It can also be connected to the controller, car braking system or other equipment through RS232 or TTL to achieve automatic braking.

The basic working parameters of R350 are shown in Table 1.

Table 1　R350 specification sheet

Function items	Function	Specification
Power	Power input	DC 12V/24V
	Single radar power consumption	＜2W
	Full load power consumption	＜5W（2 radars）
Environmental Adaptability	Operating temperature	- 40℃ ～ + 85℃
	Waterproof protection	IP67（Radar）；IP65（Controller）
	Seismic rating	5.9G
Size	Controller size	104*95*28mm（Does not include cable）
	Radar size	92*76.1*22.3mm（Does not include cable）
Radar specifications	Frequency band	77～78GHz
	Refresh rate	33Hz
	Weight	109.5g
	Number of antenna transceiver channels	2TX*4RX
	Antenna pitch beamwidth (-6dB)	-1°～+2°
	Antenna horizontal beamwidth (-6dB)	－60°～＋60°
	Distance resolution	0.2m
	Speed resolution	1.9km/h

	Speed range	±60km/h
	Detection width	0.4~8m
	Detection distance	Length 0.2~40m, detection width can be limited, up to 3 detection areas can be set (the distance of each area can be configured).
External interface	TTL	Default 1 channel TTL (optional replacement with RS232)
	RS232	
	I/O	Two outputs, corresponding to two radars. Different alarm levels output high and low levels of different frequencies during alarm. Six outputs, corresponding to different alarm levels of the two radars. When alarming, the IO output high and low levels corresponding to different levels.
	Analog output	1 way (optional)