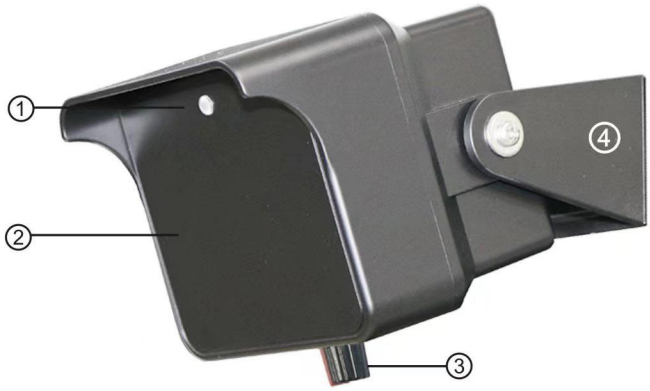
Automatic Door Detector

1 Introduction

It is a 24G millimeter-wave radar that can distinguish between pedestrians and vehicles by analyzing the characteristics of human body and vehicle movement and electromagnetic reflection characteristics. It can accurately determine the vehicle's driving direction and filter pedestri -ans. Users can choose one-way (toward) detection or two-way detection according to actual needs.

Application:

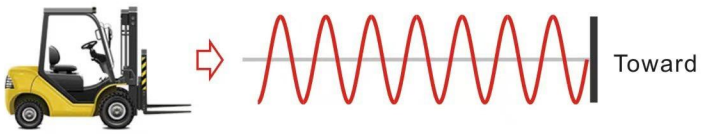
1) Industrial fast door control
2) Automatically open the gate for incoming vehicles in the one-way entrance and exit
3) Judging the vehicle's driving direction
4) Trigger function of traditional vehicle detectors

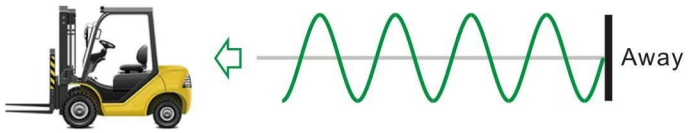


2 Product Structure

1) Working indicator: red for power indicator, blue for detection output
2) Radar antenna panel
3) Sensitivity adjustment potentiometer (1 low-9 high)
4) Mounting bracket with a special screw package

3 Working Principle



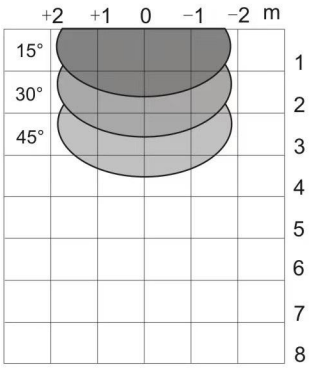


4 Detection Area and Sensitivity Adjustment

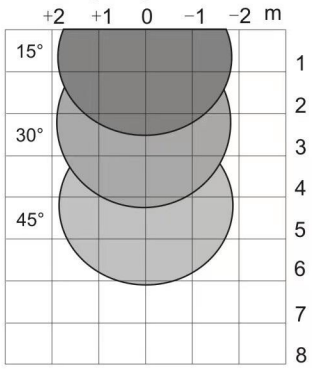
Step 1: Adjust the sensitivity value. For example, when the installation height is 3 meters, the sensitivity is adjusted to 3; when the installation height is 5 meters, the sensitivity can be adjusted to 5.

Step 2: Test on site.
The center value can be adjusted from -1 to +3 according to actual needs (the center value is the same as the installation height value).

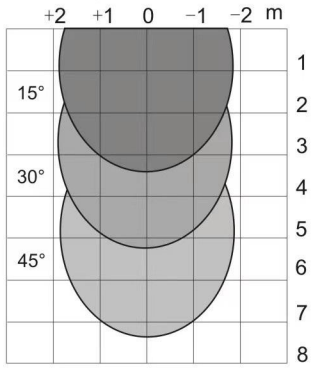
Mounting height 2.5m



Mounting height 3.5m



Mounting height 5m



Sensitivity potentiometer scale
1 to 9 corresponds to low to high

5 Parameter

Power Supply:	12-24VDC
Center Frequency:	24.125GHz
Installation Height:	2.5-8m
Detection Mode:	One-way detection/Two-way detection
Holding Time:	1s
Relay Output:	COM NO NC
Working Temperature:	-40℃ to +80℃
Housing Material:	ABS
Waterproof rating:	IP67

6 Wiring Definition

Red :	Power input 12-24VDC
Black:	
Purple:	Detection direction selection: Open circuit is one-way toward detection, short circuit is two-way detection
Brown:	
White:	Relay NO
Yellow:	Relay COM
Blue:	Relay NC
Green:	Spare