

11Ghz Microwave Sensor Truck visual reversing sensor

AD11



1. Application:

AD11 visual sensor is suitable for reversing scenarios of various commercial vehicles such as trucks, buses, forklifts, and short-range collision warning scenarios.

2. Overview:

The AD11 module is composed of a 1/2.7-inch, 2-megapixel color image CMOS sensor and an ISP image processing chip, and outputs 1920x1080 / 1280x720 / CVBS. The ISP has color matrix, 3D noise reduction, sharpness, gamma correction, automatic electronic shutter, automatic white balance, automatic gain control, adaptive backlight compensation... and integrates an 11Ghz microwave sensor to form an integrated visual sensor.

3. Technical Specifications:

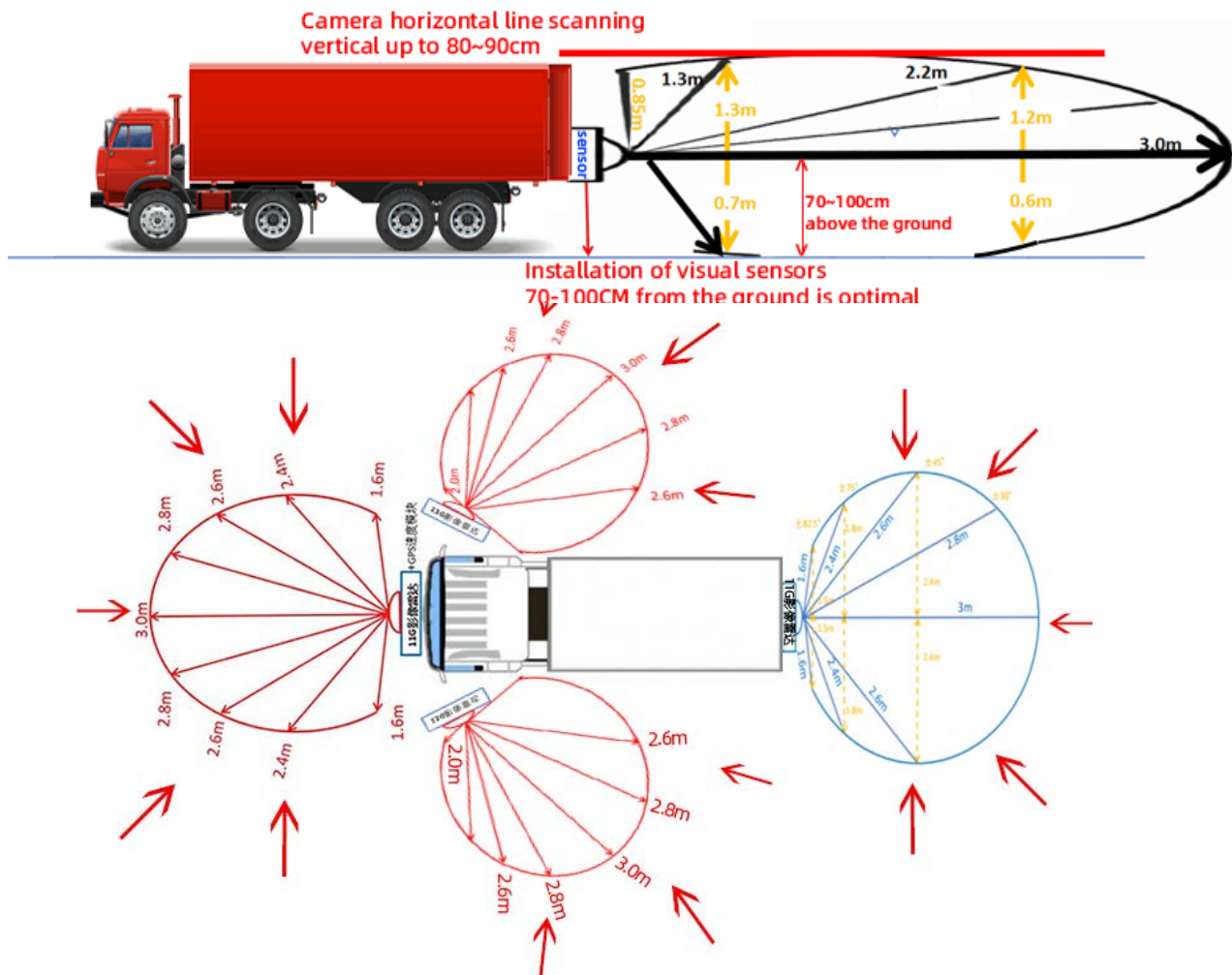
No.	Items	Specifications
1	Image Sensor	1/2.7" CMOS
2	Video Format	Pal / Ntsc
3	Resolution	1920x1080 / 1280x720 / CVBS
4	Frame Rate	25/30fps
5	Output Video Signal	AHD
6	Exposure	Auto
7	Gain	Auto
8	White Balance	Auto
9	Low Light	0.1 Lux
10	Image Characteristics	Mirror
11	Rated Operating Voltage	5v~12v / 12v~24vDC
12	Rated Operating Current	5V 350mA / 12V 160mA +/- 10mA
13	Image Quality Assurance Temperature	-30° ~60°
14	Storage Temperature	-30° ~ 75°
15	Humidity	90%RH
16	Noise Reduction Methods	3D noise reduction
17	Lens Specifications	14 Heads 16 Price

Sensor Technical Specifications

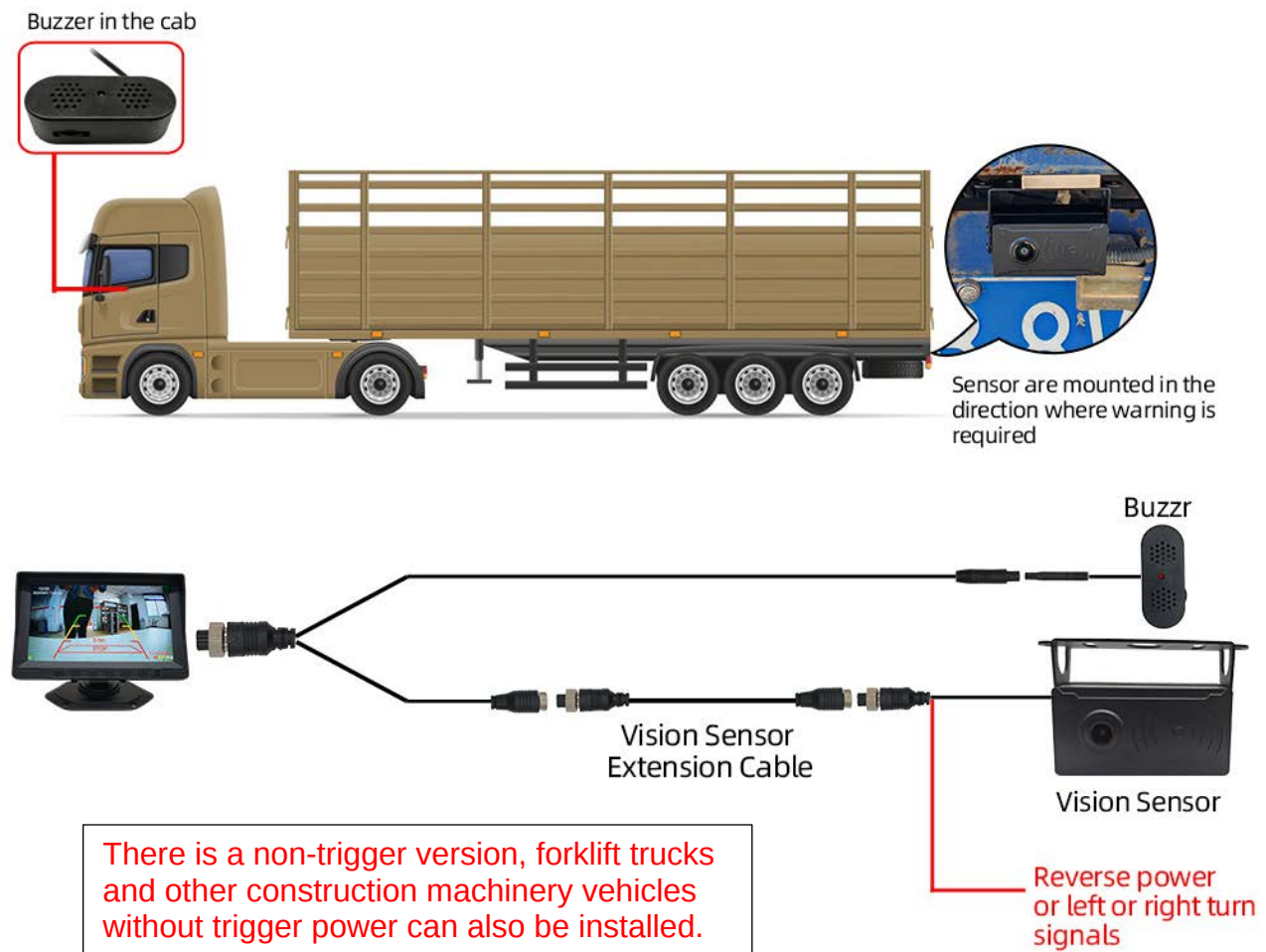
Operating Band	9.9~10.5GHz
Distance Resolution	0.01m
Measuring Accuracy	0.1m
Detection Distance	3m
Horizontal Angle	160°
Vertical Angle	105°

4. Sensor Detection Area:

Front, rear, left, right, both can be installed



5. Wiring Diagram:



6. Early Warning Principle:

- 1、 The AD11 visual sensor needs to be powered on first. After the screen is displayed normally, the sensor trigger line can be powered on to start the sensor warning function.
- 2、 After the sensor is activated, it will sense and warn objects within a range of 3 meters. When it senses that an object within the signal range has moved relative to the sensor, it will output a warning box and distance value, and simultaneously output a buzzer signal.
- 3、 Display screens that support camera formats can receive sensor warning images normally.

4、Early warning mode:

1) Forward: If the vehicle speed is lower than 20km/H, the warning is triggered; if the vehicle speed is higher than 20km/H, the warning is not triggered.

2) Left, right and rearward: Shift to reverse gear or turn on the turn signal to trigger the warning.

Level 1: 3M-2M: Buzzer interval warning + green box + digital display

Level 2: 1M-2M: Buzzer urgent warning + yellow box + digital display

Level 3: 0M-1M: Buzzer long warning + red STOP box without digital display

7. Note:

- 1、 When installing, try to stay away from frequently started high-power electrical equipment and motors and other locations with strong magnetic field interference;
- 2、 During testing, there should be no obstructions within the sensor beam range, and the test environment should be as open as possible to avoid affecting the measurement results.
- 3、 The best effect is when the visual radar is installed 80cm~100cm from the ground and in a horizontal position.

Features:

1. Microwave sensor + AHD video fusion mode output;
2. Actively detect moving objects and obstacles and issue IO alarms
3. AHD video shows the precise distance of obstacles
4. The distance range display has three color blocks of red, yellow and green, making the visual reminder effect more eye-catching;
5. IO alarm output can be connected to other sound and light alarms
6. The sound and light prompts and buzzer alarm of the IO port can work separately or at the same time. The designated gear position controls the sound and light prompt or the buzzer alarm prompt, and the response is sensitive.
7. The distance display for detecting moving objects or obstacles is accurate and clearly visible, and the detection method can be adjusted