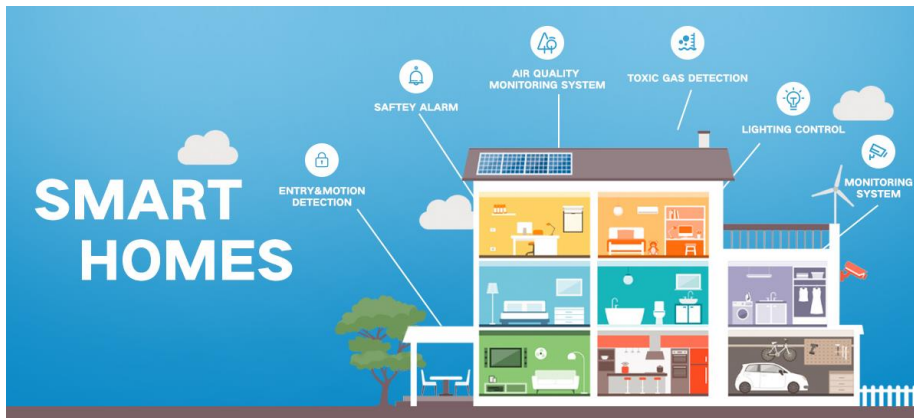


mmWave - Human Presence Detection Sensor (9 Meters)

INTRODUCTION

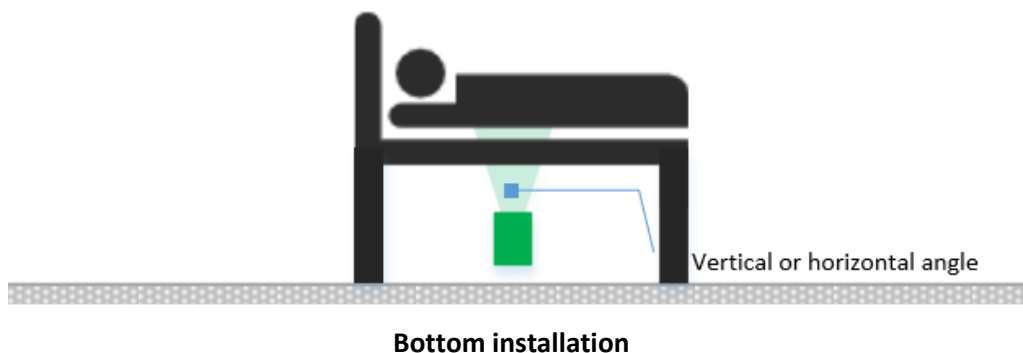
This 24GHz millimeter-wave radar sensor employs FMCW, CW multi-mode modulation, and separate transmitter and receiver antenna structure.

In working, the sensor first emits FMCW and CW radio waves to the sensing area. Next, the radio waves, reflected by all targets which are in moving, micro-moving, or extremely weak moving state in the area, are converted into electrical signals by the millimeter-wave MMIC circuit in the sensor system. After that, these signals will be sent to the processor and processed through the related signal and data algorithms. Then, the target information can be solved out.

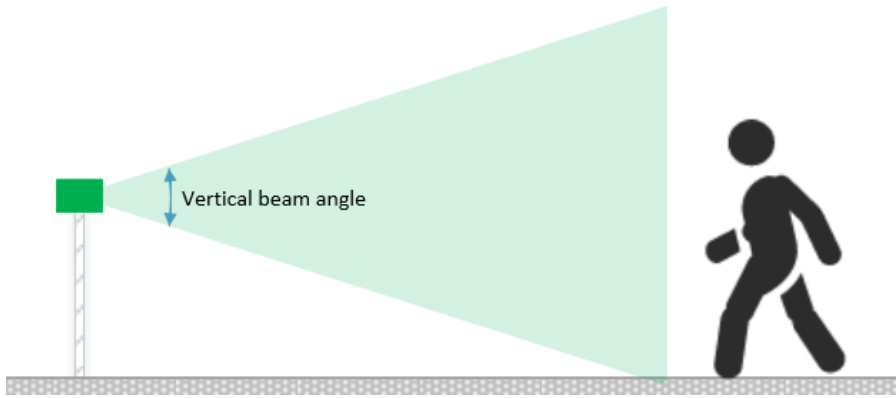


The millimeter-wave radar sensor has the functions of human presence, human stillness and human motion perception. Compared with digital infrared motion sensor, millimeter-wave radar has higher accuracy for human detection in stationary states such as people sleeping and sitting, but the response speed of millimeter-wave radar is 2-4 seconds. If there are higher requirements for response speed and accuracy, millimeter-wave radar and digital infrared motion sensor can be used together. What's more, smart home can be realized through adding light sensors and temperature sensors, such as controlling lights, air conditioners and other furnitures.

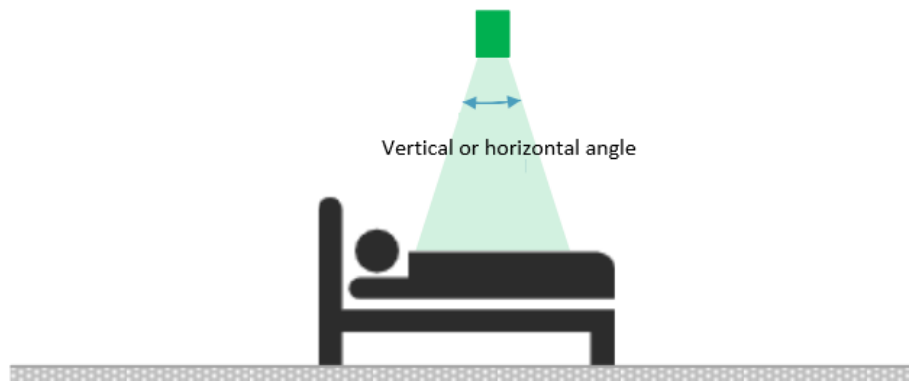
The sensing results of the millimeter-wave radar can be output through the serial port or I/O port, and the sensor module has the characteristics of strong sensing reliability, high sensitivity, small size, easy to use, and easy to embed integration.



Bottom installation



Horizontal installation



Top installation

FEATURES

Human presence sensing: sense if there is human body in areas.

I/O port switch quantity input and output control

Serial port input and output control

Strong anti-interference ability, not to be affected by snow, haze, temperature, humidity, dust, light, noise, etc.

SPECIFICATION

Power Supply: 3.6~5V

Operating Current: 90mA

Detection Distance: 9m

Equivalent Transmit Power: 9-12dBm

Beam Angle: 100*40°

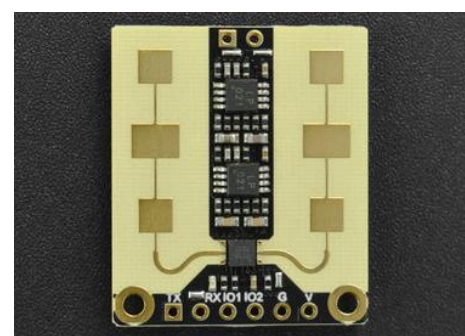
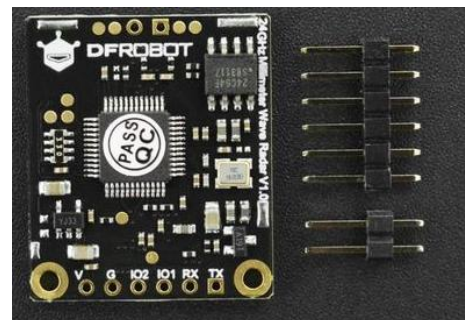
Modulation Mode: FMCW, CW

Operating Frequency: 24GHz

Operating Temperature Range: -40~85°C

Baud Rate: 115200

Dimension: 24*28mm/0.94*1.10"



SHIPPING LIST

mmWave - Human Presence Detection Sensor (9 Meters) ×1