



Using FMCW technology, it detects stationary, micro-moving, and moving human targets within the scene. Through precise human presence sensing and ranging algorithms, it allows for independent configuration of detection sensitivity and can automatically generate sensor configuration parameters, enhancing anti-interference performance. The projection radius of top-mounted detection reaches 5 m. It can detect stationary human and has the capability to detect stationary lying and sleeping human. It is a true stationary human presence sensing sensor.

			stationary lying	
Installation Method	Human Body State	Max. Coverage Area	height 2.7m	
Top-mounted		Projection radius @ height 2.7 m	-30° - 5 -60° - 31 - 60°	
	Stationary Lying	4.8 m	-90°	
Ν	Micro-motion/Motion	6.5 m	Top-mounted Detection Range	
Wall-mounted		Detection Range @ height 1.5 m	45° 45° 60° 43° 2 Wall- mounted Detection Range height 1.5 m	
Ν	Stationary Lying Micro-motion/Motion	7 m 8.5 m		
Specifications			Features	
Operating Frequency 24 ~ 24.25 GHz FCC/CE compliant			Wider Coverage: Compatible with both top- mounted and wall-mounted detection methods	
Operating Voltage	3.3 V, 5 V		Accurate Detection: Human presence detection in both lying and sleeping states	
Operating Current	50 mA		Easy Deployment: Automatically generate parameters, adapted to various scenarios quickly	
Sensor SoC	S1 series (1T1R)			
Hardware Size	20 mm x 20 mm		Worry-free Manufacturing: Easy-to-use supporting resources for quick mass production	
Interface	UART. GPIO		Scenario Optimization: Integrated commonly	

Interface

UART, GPIO

IAP Upgradable \times View/Set Param. Target Range: 0.35 m Gen. Thres. Realtime Data Cap./Anlyz. Data Update FW Rang Port No. COM4 BaudRate 921600 Refresh Disco Ver: v3.0.4 SN: FFFFFFFF

Human presence detection demonstration tool

used application scenarios

Minimalist Cost: Well-adapted new algorithms improve performance and lower costs



Smart Lighting Smart Appliances

Smart Home Smart Hotel

Reference Design | D Series