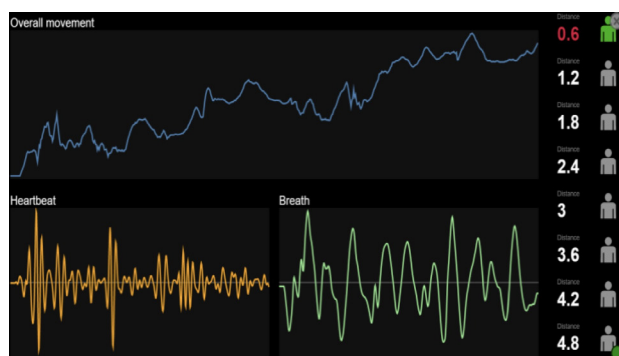




Bio-Sense Millimeter Wave (mmWave)

Radar (Radio Detection and Ranging) uses radio waves to calculate the direction, altitude and velocity of objects relative to the field and can be used to estimate shape. By embedding radar sensors, it allows us to locate objects in space and opens up many possibilities for different kinds of applications.

Millimeter wave radar refers to the radar working in the millimeter wave frequency band, which is completely unaffected by light and weather factors. It is an ideal sensor for vital sign detection and monitoring because millimeter-wave radar can provide millimeter-level distance detection accuracy.



Spec	
Description	Physiological Monitoring Device
Certification	CE / FCC EMI Class A
Starting Temperature	0° C – +40° C (32° F – 104° F)
Operating Temperature	-10° C – +40° C (-14° F – 104° F)
Storage Temperature	-25° C – +60° C (-13° F – 140° F)
Operating Humidity	10% – 90% RH
Casing Material	Plastic
Color (RAL Number)	White
Dimension	ø100*40mm
Weight	145g
Power Supply	DC12V ±10%
Power Consumption	DC12V, 250mA, 3W
Maximum Frame Rate	20 fps
Security Encryption	Base64 HTTP encryption, HTTPS encryption
Security-Access	Multiple user access levels with password protection
Event Triggers	Breathe / Heartbeat
Log	Operation log
PC Requirement	Intel® Core™ i7 or higher grade, Windows 7 or above, 8GB or above, Dedicated Graphics Card
Web browser	Microsoft® Internet Explorer® 9 or above, Microsoft® Edge (IE mode)

CPU, Memory	Embedded Quad-core ARM Cortex-A53 1.0GHz CPU, 1GB LPDDR4X, 8GB e.MMC memory
OS	Embedded Linux 4.9
Maintenance	Firmware update via HTTP and IP Scan Firmware available at web site
Ethernet	10BASE-T/100BASE-TX, RJ-45
Network Protocols	IPv4, TCP, UDP, HTTP, HTTPS, NTP, DHCP, Telnet
Max number of online users	7 simultaneous users
User accounts	10 user accounts available
Languages	English, Traditional Chinese, Simplified Chinese
Vital Signs Detection	Non-contact Heartbeat and Respiration detection
Radar	
RF Frequency	60GHz mmWave
RF Transmit Power	-10dBm max.
Radio	2 TX, 4 RX (FMCW mode)
Field of Detection	90°
Detection Range	up to 1.8m
Radar Maximum Frame Rate	20fps
Warranty	
Warranty	3 years