

S-SERIES: OCCUPANCY SENSOR



The Sonicu occupancy sensor is designed to monitor occupancy and utilization in virtually any workspace and boasts up to 98 percent recognition based on its AI-powered smart sensing.

The occupancy sensor has dual versions transmitting data via Sonicu's LoRaWAN®-based communicating system, SoniLink.

Leverage the ability to detect the presence or absence of people or movement in a space and trigger actions or adjustments accordingly. Ideal for facility managers seeking improved data to drive energy efficiency measures, cost savings around utilization as well as safety and security.



Features

- Sensors seamlessly transmit to SoniLink Hubs, creating a comprehensive monitoring network – connect hundreds of sensors to a single hub
- Our LoRaWAN®-based technology, SoniLink, ensures secure and reliable wireless connectivity. Experience real-time monitoring with range and efficiency
- Equipped with NFC for easy deployment and configuration through the SoniCloud app
- Instantly compatible with cloud-based SoniCloud monitoring hosted on AWS
- Flexible alerting options via phone call, text, email and push notification
- Large area coverage by connecting hundreds of sensors with a single hub
- 98% recognition rate based on advanced AI identification and analysis
- Wide installation height and detection range with two versions for various scenarios
- Support up to 16 mapped regions for detection
- Allow for bi-directional line-crossing people counting and people flow analysis
- Smart U-turn counting to filter redundant counting of people wandering around the area
- Support normal or blur mode and privacy masks

Specifications

People Counting & Monitoring

Field of View	Standard Version: 190 ° Horizontal, 112 ° Vertical High Ceiling Mount Version: 129.4 ° Horizontal, 68.4 ° Vertical
---------------	---

Full Monitored Area	Standard Version: 78m ² (R = 5m, H = 3m) High Ceiling Mount Version: 126m ² (L=18m, W=7m, H= 7m)
---------------------	---

Installation Height	Standard Version: 2.5m to 4m High Ceiling Mount Version: 5m to 7m
---------------------	--

Detection Rate ¹	Region Counting: Up to 95% Line Crossing Counting: Up to 98% People Flow Analysis: Up to 98%
-----------------------------	--

Advanced Feature	Mapped Detection Region Customization, Filter U-Turns, Privacy Mask
------------------	--

LoRaWAN® Transmission

Protocol	LoRaWAN®-based SoniLink
----------	-------------------------

Transmission Power	20 dBm
--------------------	--------

Sensitivity	-137 dBm @300bps
-------------	------------------

Other Interfaces

Button	1 × Reset Button, 1 × Wi-Fi Button
--------	------------------------------------

LED Indicators	1 × Wi-Fi
----------------	-----------

Power Input	2-pin 3.5 mm Terminal Block
-------------	-----------------------------

Physical Characteristics

Power Supply	5VDC / 1.5A by Type-C Port
Power Consumption	3.5W
Operating Temperature	-5°C ~ +55°C
Storage Temperature	-20°C ~ +60°C
Relative Humidity	0 ~ 95% (Non-condensing)
Dimension	85 × 85 × 20 mm (3.35 × 3.35 × 0.79 in)
Installation	Ceiling Mounting

Approvals

Regulatory	CE, FCC, RoHS
------------	---------------

Installation Height

To better utilize the advantage of AI algorithm, it's recommended to follow the below installation heights:

OBJECT	HEIGHT	NOTE
Sitting object	>2.5 m (8.2ft)	Commonly used for region people counting
Standing object	> 3 m (9.8ft) (the optimum height is 3m)	Commonly used for line cross counting

It's recommended to refer to below detection ranges² for people counting at different heights for accurate recognition:

Installation Height (m)	Detection Range (m ²)
2.5	3.0 × 4.0
3.0	4.4 × 5.7
3.5	4.9 × 6.4
4.0	5.6 × 7.4

For high ceiling mount version, the detection ranges are as below:

Installation Height (m)	Detection Range (m ²)
5.0	3.5 × 10.0
6.0	4.5 × 12.0
7.0	5.5 × 14.0

¹Tested under the recommended detection range.

²The actual detection range may vary based on the height of the target individual.