

ERS SOUND



Sound and Comfort

Sleek, Minimalistic, Compact White Labeled Design

ERS SOUND is mounted on the ceiling measuring

- Average sound level
- Peak sound level
- Temperature
- Humidity
- Motion
- Light (Illumination)
- Motion (PIR)

ERS SOUND is used in offices, libraries, classrooms, hospitals, kindergartens, etc.

ERS SOUND applies two 3.6V AA lithium batteries, providing up to 2 years battery life.

ERS SOUND is equipped with NFC for Android mobile app configuration.

ERS SOUND is compliant with standard LoRaWAN® gateways and network servers



ERS SOUND



Sound and Comfort

Sleek, Minimalistic, Compact White Labeled Design

Wireless transmission

Technology	LoRaWAN® 1.0.3
Regional frequency support	US902 – 928, EU863 – 870, AS923, AU915 – 928, KR920 – 923, RU864, IN865
Supported features	OTAA, ABP, ADR, Adaptive channel setup
Security	LoRaWAN® End-to-End encryption (AES-CTR), Data integrity protection (AES-CMAC)
LoRaWAN device type	End-device Class A/C (Configurable)
RF transmit power	14 dB / 20 dB (Specific to regions)
Link budget	137 dB (SF7) to 151 dB (SF12)

Temperature

Range	0 to 50 °C
Accuracy	±0.2 °C (See details below)
Resolution	0.1°C

Humidity

Range	0 to 85% RH (non-condensing)
Accuracy	± 2 % RH at 25 °C (See details below)
Resolution	0.1% RH

ERS SOUND



Sound and Comfort

Sleek, Minimalistic, Compact White Labeled Design

Sound

Average value range 35 – 70 dBspl (See details below)

Peak value range 65 – 99 dBspl

Resolution 1 dB

Accuracy ±5 dB

Motion (Passive infrared)

Detection area 94 ° Horizontal, 82 ° Vertical (See details below)

Detection distance 5 m

Light (Illumination)

Range 4 - 2000 lux

Accuracy ±10%

Resolution 1 Lux



Gateway UG65



ERS SOUND



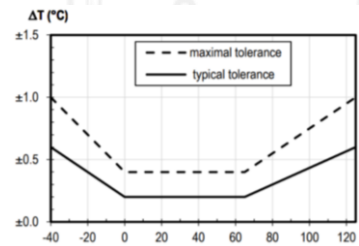
Sound and Comfort

Sleek, Minimalistic, Compact White Labeled Design

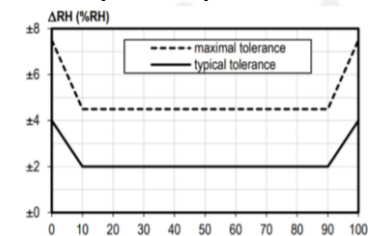
Physical characteristics

Power supply	2 x 3.6V AA Lithium Batteries
Battery life	Up to 2 years, but depends on sample interval, transmit interval, data rate, and environmental factors.
Weight	60 g excluding batteries / 100 g including batteries
Dimensions	86 x 86 x 27 mm
Enclosure	Plastic, PC/ABS
NFC	Supporting configuration via mobile Android app e.g., setting of Sampling Interval, Data upload interval, etc.
Installation	Wall mounted

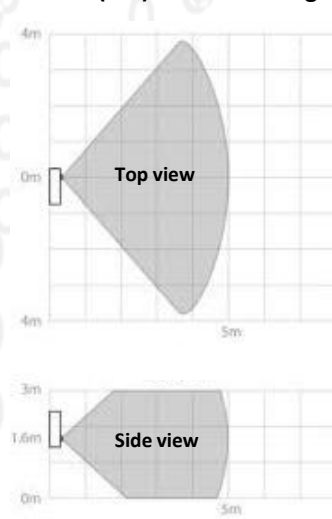
Temperature accuracy



Humidity accuracy



Motion (PIR) detection range

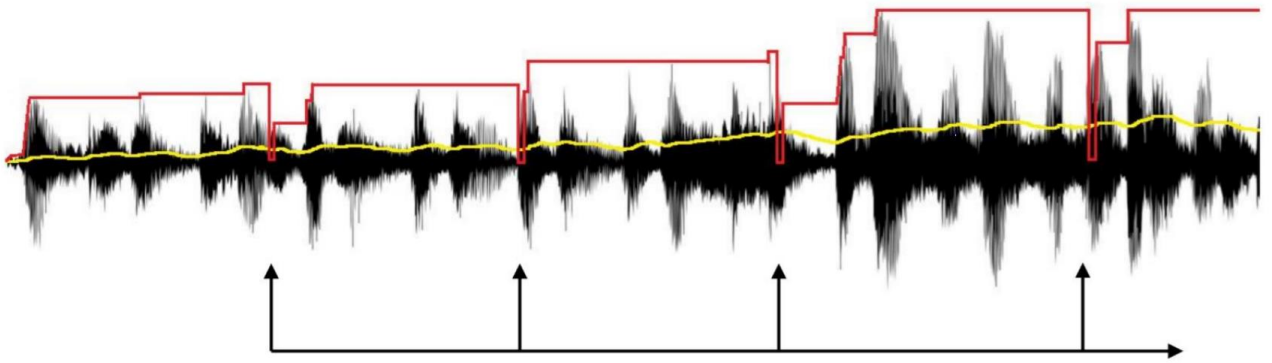


ERS SOUND



Room Occupancy and Comfort

Sleek, Minimalistic, Compact White Labeled Design



The sound sensor measures the average and peak sound pressure level with dBa filtering.

It samples every 10s and does the final calculation before sending the data at the desired send interval.

For every send interval, the ERS Sound calculates total peak and average for all samples.