

ERS



Comfort Sensor

Sleek, Minimalistic, Compact White Labeled Design

ERS is ideal for indoor comfort applications, measuring

- Temperature
- Humidity
- Light (Illumination)
- Motion (PIR)

ERS is widely used in offices, stores, classrooms, hospitals, kindergartens, etc.



ERS applies two 3.6V AA lithium batteries, providing up to 10 years battery life.

ERS is equipped with NFC for Android mobile app configuration.

ERS is compliant with standard LoRaWAN® gateways and network servers



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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

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Motion (Passive infrared)

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

Detection distance 5 m

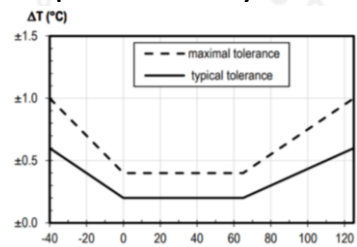
Light (Illumination)

Range 4 - 2000 lux

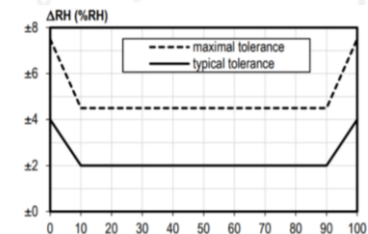
Accuracy ±10%

Resolution 1 Lux

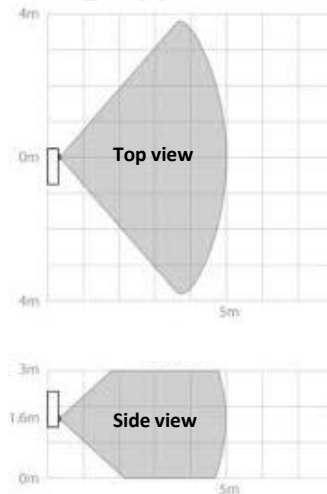
Temperature accuracy



Humidity accuracy



Motion (PIR) detection range



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Physical characteristics

Power supply	2 x 3.6V AA Lithium Batteries
Battery life	Up to 10 years, but depends on sample interval, transmit interval, data rate, and environmental factors.
Weight	80 g excluding batteries / 120 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 mounting



Gateway UG65