

# ERS VOC



## Indoor Air Quality

Sleek, Minimalistic, Compact White Labeled Design

ERS VOC is ideal for Indoor Air Quality applications, measuring

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

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

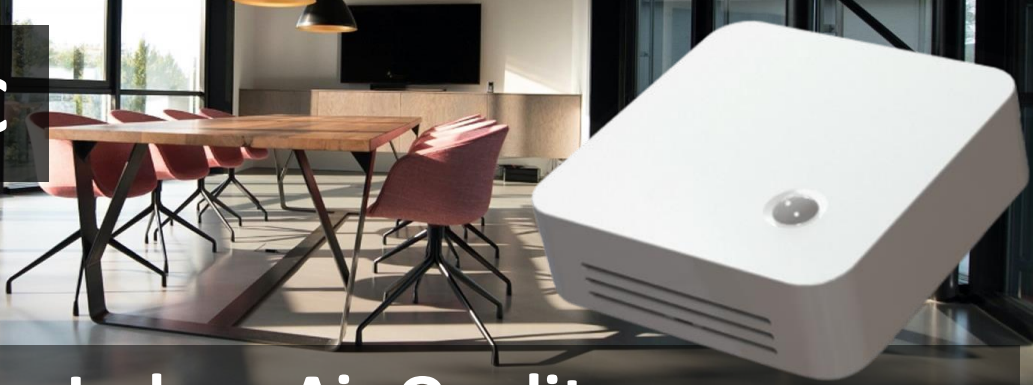
ERS VOC applies two 3.6V AA lithium batteries, providing up to 5 years battery life.

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

ERS VOC is compliant with standard LoRaWAN<sup>®</sup> 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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### VOC

Range	0 – 60000 ppb TVOC, 0 – 1000 ppm Ethanol (See details below)
Accuracy	15 % of measured value (See details below)
Resolution	1 ppb within range: 0 ppb – 2008 ppb 6 ppb within range: 2008 ppb – 11110 ppb 32 ppb within range: 11110 ppb – 60000 ppb

### 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



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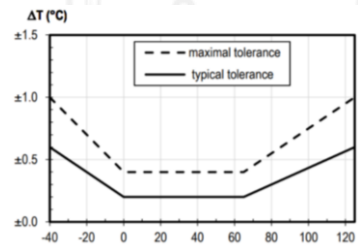
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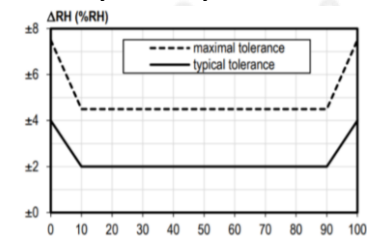
### Physical characteristics

Power supply	2 x 3.6V AA Lithium Batteries
Battery life	Up to 5 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 mounting

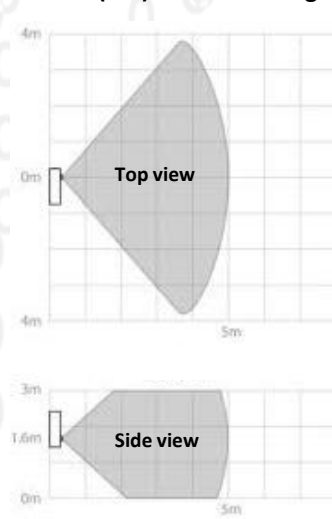
#### Temperature accuracy



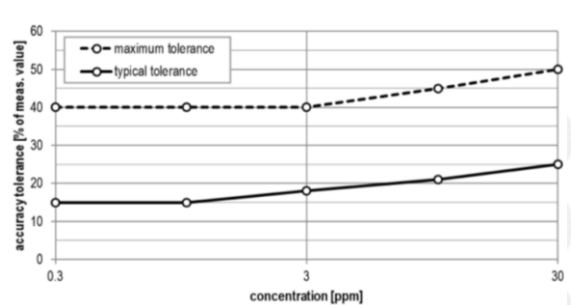
#### Humidity accuracy



#### Motion (PIR) detection range



#### Ethanol



#### Specified Range: 0.3 – 30 ppm Ethanol

The specified measurement range covers the gas concentrations expected in indoor air quality applications.