

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[®] 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)

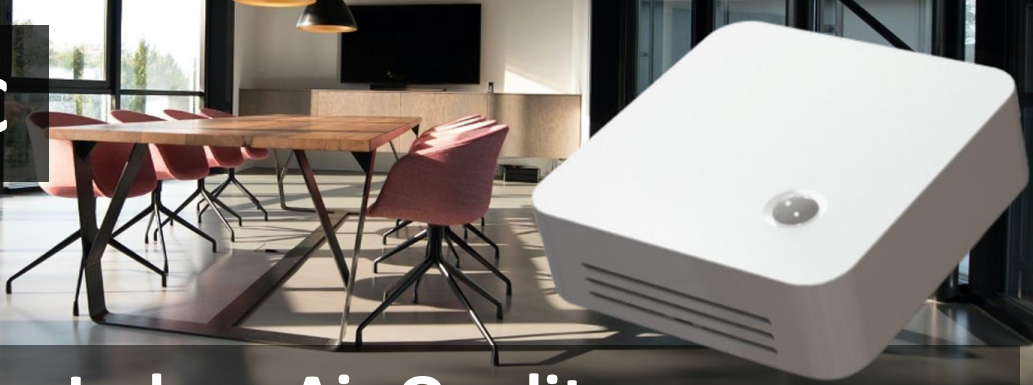
Temperature

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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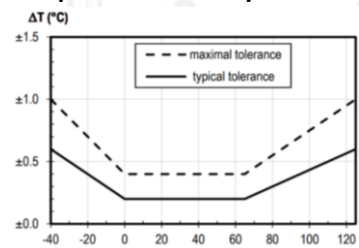
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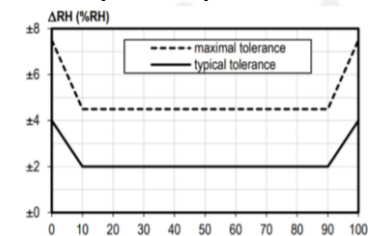
Physical characteristics

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

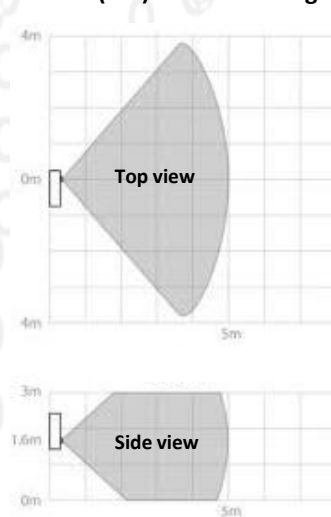
Temperature accuracy



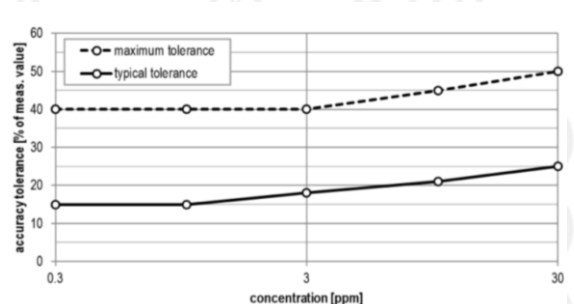
Humidity accuracy



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.