

# EMS DESK



## Desk Occupancy Sensor

Sleek, Minimalistic, Compact White Labeled Design

EMS DESK detect and measure:

- Occupancy
- Movement
- Temperature
- Humidity
- Acceleration

EMS Desk is slightly larger than an AA-battery and ideal for mounting under desks.

It can be used for measuring desk occupancy or as a discrete indoor environment sensor. With the body heat sensor, it can detect when somebody is standing/sitting by a desk.

Mount it in a door opening to detect whenever someone is walking by.

EMS DESK applies one 3.6V AA lithium batteries, providing up to 10 years battery life.

EMS DESK is equipped with NFC for Android mobile app configuration.

EMS DESK is compliant with standard LoRaWAN<sup>®</sup> gateways and network servers.

LoRaWAN<sup>®</sup> certification is in progress



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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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### Occupancy (Thermopile)

Detection range 1 m

Field of view 60°

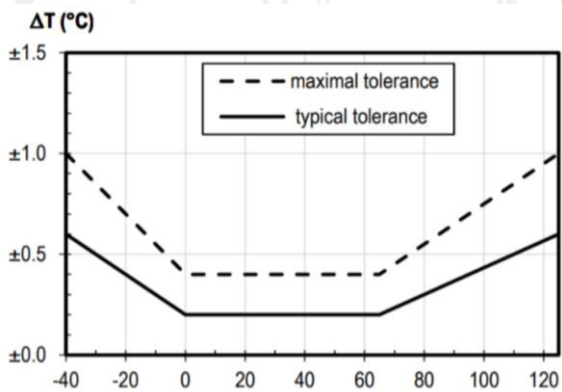
### Accelerometer

Range +/- 2.0 g

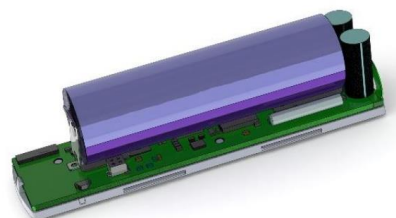
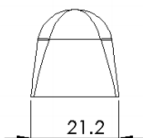
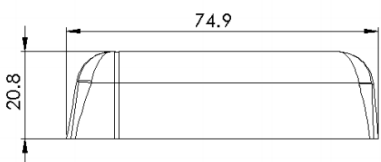
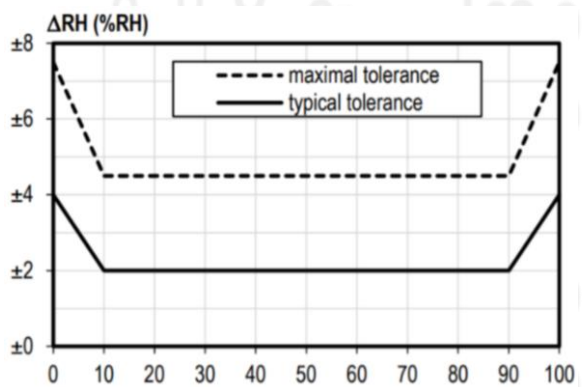
Sensitivity 16 mg/digit

Data rate 10 Hz

### Temperature accuracy



### Humidity accuracy



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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	10g excluding battery / 30g including battery
Dimensions	21.2 x 74.9 x 20.8 mm
Enclosure	Plastic, PC/ABS
NFC	Supporting configuration via mobile Android app e.g., setting of Sampling Interval, Data upload interval, etc.
Installation	Desk or wall mounting



Gateway UG65

