

# OY1110 LoRaWAN Temperature and humidity sensor

## Product datasheet

**LoRaWAN sensor that measures temperature and humidity, with an incredible maintenance free lifetime of 10 years at a 5-minute measurement interval. Easy to use, configurable over the air and stylish in design to fit into indoor spaces.**

### Accuracy and range

Temperature accuracy	± 0,2 °C (conditions 0 °C to +50 °C)
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Temperature range	-20 °C to +60 °C
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Humidity accuracy	± 2% (conditions 10-90% RH)
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Humidity range	0% to 100% non-condensing
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*Accuracy of ± 0,1 °C and ± 1,5% humidity available upon request*

### Connectivity

Network	LoRaWAN
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Frequency bands	868 MHz
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Provisioning	Over the air & personalization
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### Size

Size	65 x 75 x 28 mm
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Weight	75g
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### Security

Algorithms	AES-128
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Hardware	Cryptographic co-processor
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Features	Secure boot
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	Secure firmware upgrade
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*Hardware based ultra-secure key storage*



### Battery life

Battery life length	10 years (5 minute intervals, SF7)
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Primary cell	Lithium-thionyl 3.6V
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Capacity	3.6 Ah
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### Configuration

Measurement intervals	1 minute – 1 week*
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Transmission intervals	1 minute – 12 weeks*
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*\*Default 15 minutes, configurable over the air*

*Unique App EUI available upon request*

### Enclosure

IP30

### Certifications

RoHS compliant

CE

LoRaWAN

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### High quality, high security

Talkpool's LoRaWAN sensor devices are developed and designed in Sweden, where Talkpool's IoT headquarters are located as well. The company produces high quality sensor devices that are reliable in use. The devices have a long battery life and are easy to install, perfect for mass deployments.

complaints about the temperature in winter time, when it becomes colder. After the heating season, the heating can be lowered again in line with the temperature data.

### Building damage prevention

One of the primary use cases of the OY1110 LoRaWAN Temperature and humidity sensors is in building damage prevention. These damages are typically discovered too late, resulting in repairs and down-time. Common causes are ventilation problems, construction errors and water leakages. In modern, air-tight buildings, molds are often quickly forming as soon as there is a problem with the ventilation system. In older buildings there can be deeper rooted causes such as structural bad ventilation. Temperature and humidity data serves as input for the calculation of the risk for mold forming, so that building damages can be prevented.



### Real estate management

Another very common use case for the OY1110 LoRaWAN Temperature and humidity sensor is in real estate management. The wireless sensor devices are easily installed and provide the property manager with useful temperature data. This is used to prevent