

LoRaWAN Temperature & Humidity Sensor

LHT65N-E31F



OVERVIEW:

The Dragino **LHT65N-E31F Temperature & Humidity sensor** is a Long Range LoRaWAN Sensor. It includes a built-in Temperature & Humidity sensor and has an external Temperature & Humidity probe.

The LHT65N-E31F allows users to **send data and reach extremely long ranges**. It provides ultra-long range spread spectrum communication and high interference immunity whilst minimizing current consumption. It targets professional wireless sensor network applications such as irrigation systems, smart metering, smart cities, building automation, and so on.

LHT65N-E31F external probe uses **Sensirion SHT31F high accuracy Temperature & Humidity sensor**.

LHT65N-E31F has a **built-in 2400mAh non-chargeable battery** which can be used for up to 10 years*.

LHT65N-E31F is full compatible with **LoRaWAN v1.0.3 Class A protocol**, it can work with a standard LoRaWAN gateway.

LHT65N-E31F **supports Datalog feature**. It will record the data when there is no network coverage and users can retrieve the sensor value later to ensure no miss for every sensor reading.

*The actual battery life depends on how often to send data, please see battery analyzer chapter.

Features:

- LoRaWAN v1.0.3 Class A protocol
- Bands: CN470/EU433/KR920/US915/EU868/AS923/AU915
- Built-in and external Temperature & Humidity sensor, External probe length of 2 meters
- Built-in 2400mAh battery for more than 10 years of use
- Remote configure parameters via LoRaWAN Downlink
- AT Commands to change parameters
- Firmware upgradable via program port
- Tri-color LED to indicate status
- Datalog feature

Sensor Spec:

Built-in Temperature Sensor:

- Resolution: 0.01 °C
- Accuracy Tolerance : Typ ± 0.3 °C
- Long Term Drift: < 0.02 °C/yr
- Operating Range: -40 ~ 80 °C

Built-in Humidity Sensor:

- Resolution: 0.04% RH
- Accuracy Tolerance : Typ $\pm 3\%$ RH
- Long Term Drift: < 0.25 RH/yr
- Operating Range: 0 ~ 96% RH

External Temperature Sensor:

- Resolution: 0.01 °C
- Accuracy Tolerance: Typ ± 0.3 °C
- Long Term Drift: < 0.02 °C/yr
- Operating Range: -40 ~ 125 °C

External Humidity Sensor:

- Resolution: 0.04% RH
- Accuracy Tolerance : Typ $\pm 3\%$ RH
- Long Term Drift: < 0.25 RH/yr
- Operating Range: 0 ~ 96% RH

Order Info: LHT65N-E31F-XX

- XX: Frequency Bands, options:
EU433, CN470, EU868, IN865,
KR920, AS923, AU915, US915