

LoRaWAN Temperature & Humidity Sensor

LHT65N



OVERVIEW:

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

The LHT65N 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 has a built-in 2400mAh non-chargeable battery which can be used for more than 10 years*.

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

LHT65N 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:

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

Sensor Spec:

Built-in Temperature Sensor:

- Resolution: 0.01°C
- Accuracy Tolerance : Typ $\pm 0.3^{\circ}\text{C}$
- Long Term Drift: $< 0.02^{\circ}\text{C/yr}$
- Operating Range: $-40 \sim 80^{\circ}\text{C}$

Built-in Humidity Sensor:

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

External Temperature Sensor:

- Resolution: 0.0625 °C
- $\pm 0.5^{\circ}\text{C}$ accuracy from -10°C to $+85^{\circ}\text{C}$
- $\pm 2^{\circ}\text{C}$ accuracy from -55°C to $+125^{\circ}\text{C}$
- Operating Range: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$

Order Info: LHT65N-XX

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