

# LoRaWAN Temperature & Humidity Sensor

## LHT65S-NE117



## OVERVIEW:

The Dragino LHT65S-NE117 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 LHT65S-NE117 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.

LHT65S-NE117 external probe uses **TI TMP117A NIST traceability temperature sensor**, with 0.1°C accuracy in normal temperature range.

LHT65S-NE117 has a **built-in 2400mAh non-chargeable battery** which can be used for more than 10 years\*.

LHT65S-NE117 is full compatible with **LoRaWAN v1.0.3 Class A protocol**, it can work with a standard LoRaWAN gateway.

LHT65S-NE117 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.

## Features:

- LoRaWAN v1.0.3 Class A protocol
- Datalog feature
- Tri-color LED to indicate status
- AT Commands to change parameters
- Firmware upgradable via program port
- Built-in Temperature & Humidity sensor
- External probe uses TI TMP117A NIST traceability temperature 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  $\pm 0.3$  °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:

- silica gel cable
- $\pm 0.1$  °C (maximum) from -20 °C to 50 °C
- $\pm 0.2$  °C (maximum) from -40 °C to 100 °C
- $\pm 0.3$  °C (maximum) from -55 °C to 150 °C

## Order Info:

### Part Number: LHT65S-NE117-XX

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