

# Industrial LoRaWAN Temperature Transmitter

**LTC2**

## OVERVIEW:

The Dragino LTC2 Industrial LoRaWAN Temperature Transmitter is designed to monitor temperature for different environment. It supports to read PT100 probe and convert the value to temperature and uplink to IoT server via LoRaWAN protocol.

LTC2 supports datalog feature. User can retrieve the sensor value via LoRaWAN downlink command.

LTC2 is powered by **8500mAh Li-SOCI2 battery** for long time measurement. The battery can run 2~10 years depends on the network environment and working mode.

Each LTC2 has two internal 16 bit ADC interfaces and are calibrated on 12 set resistors to make sure the accuracy measurement on wide range.

LTC2 is LoRaWAN v1.0.3 compatible. Each LTC2 is pre-load with a set of unique keys for LoRaWAN registration, register these keys to local LoRaWAN server and it will auto connect after power on.

### Features:

- LoRaWAN 1.0.3 compliant
- max: 2 x monitor temperature channels
- Support 3 -wire PT-100
- 8500mAh Li-SOCI2 Battery
- Firmware upgrade via console
- Wall Mountable
- Configurable via LoRa or UART
- Datalog and retrieve via LoRaWAN
- Use pre-load PT100 probe or 3rd PT100 probe
- Factory calibration for different resistance range
- Support accuracy measure of resistance and upload
- Battery Monitoring and upload

### Power Consumption:

- Sleeping Mode: 33uA
- Sampling: 20mA
- LoRa Transmit: 24 ~ 150mA

### Dimension:

- Size: 150 x 120 x 55 mm
- Net Weight: As Per Probe option

## Specification:

### Temperature Sensor:

- Range: as per probe option
- Accuracy: 0 ~ 80°C ± 0.5°C
- Resolution: 0.01°C

## Application:

- Logistics and Supply Chain Management
- Food management
- Cold chains solution
- Industrial Monitoring and Control

## Order Info:

**LTC2-XX-YY**

**XX:** Probe Option, include:  
SI, LT, FS, HT, FT, NA, See next page

**YY:** Frequency band , includes:  
EU868, US915, AU915, AS923, EU433  
IN865, KR920, KZ865, RU864 or CN470

# LoRaWAN Temperature Transmitter -- Probe Option I

## LTC2-SI Standard IP68

- Installation: Insert
- Probe Dimension: 4\*30mm
- Measure Range: -50 ~ 200 °C
- Cable Length: 2 meters
- Heraeus PT100
- Suitable Environment: General environment



## LTC2-LT Low Temperature

- Installation: Insert
- Dimension: 4\*30mm
- Measure Range: -196 ~ 150 °C
- Cable Length: 2 meters
- Heraeus PT100
- Suitable Environment: Low temperature measurement, such as COVID vaccine transport.



## LTC2-FS Food Safety Type:

- Installation: Insert
- Dimension: 4\*150 mm
- Measure Range: -50 ~ 200 °C
- Cable Length: 2 meters
- Heraeus PT100
- Suitable Environment: Foods.



## LTC2-FT Flat Type:

- Installation: Attached
- Dimension: 8\*25mm
- Measure Range: -50 ~ 200 °C
- Heraeus PT100
- Suitable Environment: measure flat object, the whole flat side is measurement point.



## LTC2-NA No Probe:

- User can connect to their own PT100 Probe
- Grand Hole: M12
- Suitable Environment: Connect to customized probe



# LoRaWAN Temperature Transmitter -- Probe Option II

## LTC2-HT High Temperature

- Installation: Insert
- Probe Dimension: 4\*30mm
- Measure Range: -70 ~ 550 °C
- Cable Length: 3 meters
- Heraeus PT100
- Suitable Environment:  
High Temperature

