

Industrial LoRaWAN Temperature Transmitter





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

LTC2 is powered by 8500 mA Li-SOCI2 battery for long time measurement. The battery can run $2 \sim 10$ 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 accurancy 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 upgrable 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 resistorance range
- Support accurancy measure of resistance and upload
- Battery Monitoring and upload

Specification:

Temperature Sensor:

- Range: as per probe option
- Accurancy: $0 \sim 80^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$
- Resolution: 0.01°C

Power Comsuption:

Sleeping Mode: 33uA

• Sampling: 20mA

• LoRa Transmit: 24 ~ 150mA

Dimension:

• Size: 150 x 120 x 55 mm

• Net Weight: As Per Probe option

Order Info:

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

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LoRaWAN Temperature Transmitter -- Probe Option

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



