

LoRaWAN Contact Sensor

CPL03-LB



OVERVIEW:

The Dragino CPL03-LB is a **LoRaWAN Contact Sensor** for Internet of Things solution. It **detects dry contact status, open time, open counts**, and then upload to IoT server via LoRaWAN wireless protocol.

The CPL03-LB will send periodically data every day as well as for each dry contact action. It also counts the contact open times and calculate last open duration. User can also disable the uplink for each open/close event, instead, device can count each open event and uplink periodically.

The LoRa wireless technology used in CPL03-LB allows device to send data and reach extremely long ranges at low data-rates. It provides ultra-long range spread spectrum communication and high interference immunity whilst minimizing current consumption.

CPL03-LB **supports open alarm** feature, user can set open alarm for instant notice. CPL03-LB **supports Datalog** feature, it can save the data when there is no LoRaWAN network and uplink when network recover.

CPL03-LB is designed for outdoor use. It has a weatherproof enclosure and industrial level battery to work in low to high temperatures.

CPL03-LB supports **BLE configure** and **wireless OTA** update which make user easy to use.

CPL03-LB is powered by **8500mAh Li-SOCI2 battery**, it is designed for long term use up to 5 years.

Each CPL03-LB is pre-load with a set of unique keys for LoRaWAN registrations, register these keys to local LoRaWAN server and it will auto connect after power on.

Features:

- LoRaWAN 1.0.3 Class A
- Bands: CN470/EU433/KR920/US915/EU868/AS923/AU915/IN865
- Ultra-low power consumption
- Open/Close detect
- Open/Close statistics
- Supports open alarm feature
- Supports Datalog feature
- Support BLE and LoRaWAN remote configure.
- Support wireless OTA update firmware
- AT Commands to change parameters
- Downlink to change configure
- Uplink on periodically and open/close event
- 8500mAh Battery for long term use

Specification:

Common DC Characteristics:

- Supply Voltage: 2.5v ~ 3.6v
- Operating Temperature: -40 ~ 85°C

LoRa Spec:

- Frequency Range, Band 1 (HF): 862 ~ 1020 Mhz, Band 2 (LF): 410 ~ 528 Mhz
- Max +22 dBm constant RF output vs.
- RX sensitivity: down to -139 dBm.
- Excellent blocking immunity.

Battery:

- Li/SOCI2 un-chargeable battery
- Capacity: 8500mAh
- Self-Discharge: <1% / Year @ 25°C
- Max continuously current: 130mA
- Max boost current: 2A, 1 second

Power Consumption:

- Sleep Mode: 5uA @ 3.3v
- LoRa Transmit Mode: 125mA @ 20dBm, 82mA @ 14dBm

Applications:

- Open/Close Detection
- Pulse meter application
- Dry Contact Detection