

LoRaWAN UVC Radiation Sensor

UV254-LB



OVERVIEW:

The Dragino UV254-LB is a [LoRaWAN UVC Radiation Sensor](#) for Internet of Things solution. UV254-LB is an indoor UVC sensor specially designed for [detecting the intensity of ultraviolet lamps](#). UV254-LB will convert the UVC Intensity to LoRaWAN wireless data and send to IoT platform via LoRaWAN gateway.

UVC is harmful to human health, and UVC lamp will lose efficacy after long time use. With UV254-LB, administrator can know if the UVC lamp is operate efficacy and make sure it won't work in unexpected time.

The LoRa wireless technology used in UV254-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.

UV254-LB supports [BLE configure](#) and [wireless OTA](#) update which make user easy to use.

UV254-LB is powered by [8500mAh Li-SOCI2 battery](#), it is designed for long term use up to 5 years.

Each UV254-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
- Ultra-low power consumption
- Detect UVC lamp working status
- Detect UVC lamp working efficiency
- Peak response spectrum 254nm
- Monitor Battery Level
- Bands: CN470/EU433/KR920/US915/EU868/AS923/AU915/IN865
- Support BLE and LoRaWAN remote configure.
- Support wireless OTA update firmware
- Uplink on periodically
- Downlink to change configure
- 8500mAh Battery for long term use

Order Info:

Part Number: UV254-LB-XX

XX: The default frequency band

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

Specification:

Common DC Characteristics:

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

Probe Spec :

- Measuring range 0 ~ 5mw/cm²
- Response spectrum range 254nm±5nm
- Peak response spectrum 254nm

LoRa Spec:

- Frequency Range, Band 1 (HF): 862 ~ 1020 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

Use Environment

Detect UV Lamps Status in difference environment as below

Kindergarten



Hospital Environment



Public Environment



Catering Environment



Office Environment



Plant Environment

