



**DRAGINO**

# **DRAGINO PRODUCT LIST**

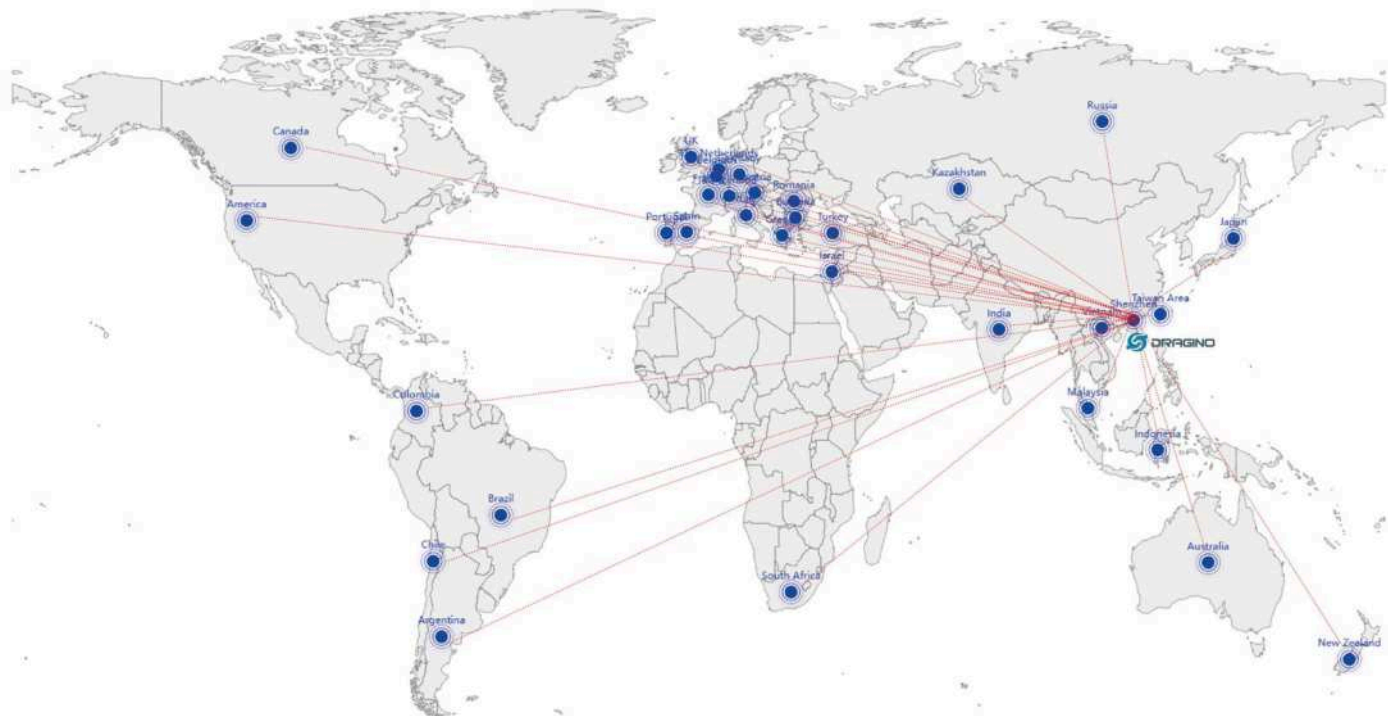
**07,2025**

# ABOUT US

## Company Profile

We are the leading IoT hardware supplier of long-Distance & Ultra-low power consumption IoT devices. We design, develop and manufacture different kinds of products for the Internet of Things solutions. Since being founded in 2013, We keep focused on introducing more IoT products into the market and providing our customers with easier installation & cost-effective IoT hardware. Most of our team member comes from the communication industry with rich working experience, focus on the Internet of Things industry and keep evaluating new technology on improving user experience in IoT solution. Dragino's products serve customers from all over the world and win high comments on the customer side. We have a set of offshore products and development kits to help clients to fast deploy IoT solutions. We aim to become a trusted and helpful partner for our clients and get success in the Internet of Things market together.





## Distribution Channels





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# Generic End Node Series

## Sensor Type: General Wireless End Node

Model: SN50v3-xB /xS

### Key Feature

- \* +5v controllable output
  - \* 3 x Interrupt or Digital IN/OUT pins
  - \* 3 x one-wire interfaces
  - \* 1 x UART Interface
  - \* 1 x I2C Interface
  - \* GNSS for Location Report (for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500 mAh Li-SOCI2 battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Metering
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory

### Option



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SN50v3-xB/xS



## Sensor Type: RS485 Converter

Model: RS485-xB/xS

### Key Feature

- \* +5v controllable output
  - \* 1 x RS485 Interface
  - \* 1 x UART Interface , 3.3v or 5v
  - \* 1 x Interrupt or Digital IN pins
  - \* 1 x I2C Interface
  - \* 1 x one wire interface
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500 mAh Li-SOCI2 battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Metering
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory

### Option



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RS485-xB/xS



## Sensor Type: Analog Sensor

Model: PS-xB/xS-NA

### Key Feature

- \* 1 x 0~20mA input , 1 x 0~30v input
  - \* 5v and 12v output to power external sensor
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500 mAh Li-SOCI2 battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory

### Option



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PS-xB/xS-NA



## Sensor Type: LoRaWAN I/O Controller

Model: LT-22222-L

Key Feature

Application

Option

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Indoor

- \* 2 x Digital Input (Bi-direction)
  - \* 2 x Digital Output
  - \* 2 x Relay Output (5A@250VAC / 30VDC)
  - \* 2 x 0~20mA Analog Input (res:0.01mA)
  - \* 2 x 0~30V Analog Input (res:0.01v)
  - \* 1 x Counting Port
- Power Input: External 7~24v DC input

- \* Smart Buildings & Home Automation
- \* Smart Metering
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory



LT-22222-L

## Sensor Type: RS485 to LoRaWAN Converter

Model: RS485-LN

Key Feature

Application

Option

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Indoor

- \* RS485
  - \* Modbus
  - \* Interrupt
- Power Input: External 7~24v DC input

- \* Smart Buildings & Home Automation
- \* Smart Metering
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory



RS485-LN

## Sensor Type: LoRaWAN Vibration Sensor

Model: LHT65N-VIB

Key Feature

Application

Option

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Indoor

Outdoor

- \* Temperature Accuracy : Typ  $\pm 0.3$  °C
  - \* Temperature Range: -40 ~ 80 °C
  - \* Humidity Accuracy : Typ  $\pm 3$  %RH
  - \* Humidity Range: 0 ~ 96 %RH
  - \* External Probe:
    - > Detecting object vibration status
    - > 3-axis accelerator for x,y,z
    - > Small size for easy installation
- Power Input: 2400 mAh Li-SOCI2 battery

- \* Monitoring equipment status
- \* Water leakage alarm
- \* Usage statistics
- \* Vibration intensity detection



LHT65N-VIB

## Sensor Type: BLE to LoRaWAN Hub

Model: BH01-LB /LS



### Key Feature

- \* Data collection: Bluetooth tags monitor environmental parameters in real time and upload data to the Hub via BLE protocol
  - \* Combines BLE's short-range precision with LoRaWAN's Long range transmission
  - \* Support Bluetooth v5.1 remote configure and update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500 mAh Li-SOCI2 battery

### Application

- \* Cold Chain Logistics
- \* Smart Factory Monitoring
- \* Warehouse Monitoring
- \* Greenhouse Monitoring

### Option



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BH01-LB/LS

# Temperature & Humidity Series

## Sensor Type: Temperature Sensor

Model: D2x-xB/xS

Key Feature

Application

Option

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- \* 1 ~ 3 External Temperature Probes
  - \* Dallas DS18B20
  - \* Range: -55 to + 125°C
  - \* Accuracy  $\pm 0.5^{\circ}\text{C}$  (max  $\pm 2.0^{\circ}\text{C}$ )
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCl<sub>2</sub> battery

- \* Smart Buildings & Home Automation
- \* Smart Factory



D2x-xB/xS

## Sensor Type: Temperature & Humidity Sensor

Model: S31\_S31B-xB/xS

Key Feature

Application

Option

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- \* External 3 meters SHT31 probe (For S31)
  - \* Temperature Range: -40 to + 80°C
  - \* Temperature Accuracy:  $\pm 0.2$  @ 0-90 °C
  - \* Humidity Range: 0 ~ 99.9% RH
  - \* Humidity Accuracy:  $\pm 2\%$ RH (0 ~ 100%RH)
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCl<sub>2</sub> battery

- \* Smart Buildings & Home Automation
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory



S31\_S31B-xB/xS

## Sensor Type: Thermocouple Converter

Model: TC01\_TC11-xB/xS

Key Feature

Application

Option

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- \* K Type Thermocouple (-50 ~ 200°C) (For model TC11)
  - \* 2 wire to 3rd party Thermocouple (For model TC01)
  - \* Temperature Alarm
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCl<sub>2</sub> battery

- \* Smart Buildings & Home Automation
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory



TC01\_TC11-xB/xS

## Sensor Type: LoRaWAN Temperature Transmitter

Model: LTC2

### Key Feature

- \* max: 2 x monitor temperature channels
  - \* Support 3 -wire PT-100
  - \* Use pre-load PT100 probe or 3rd PT100 probe
  - \* Factory calibration for different resistance range
- Power Input: Built-in 8500mAh Li-SOCl2 battery

### Application

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

Option



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Outdoor



LTC2

## Sensor Type: LoRaWAN Temperature & Humidity sensor

Model: LHT52

### Key Feature

- \* Temperature Accuracy :  $\pm 0.3$  °C
  - \* Temperature Range: -20 ~ 50 °C
  - \* Humidity Accuracy : Typ  $\pm 3$  %RH
  - \* Humidity Range: 0 ~ 99 %RH
  - External Temperature Range: -55 °C ~ 125 °C
  - \*  $\pm 0.5$ °C accuracy from -10°C to +85°C
  - \*  $\pm 2$ °C accuracy from -55°C to +125°C
- Power Input: 2 x AAA batteries

### Application

- \* Smart Buildings & Home Automation
- \* Smart Cities
- \* Smart Factory

Option



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Indoor



LHT52

## Sensor Type: LoRaWAN Temperature & Humidity sensor

Model: LHT65N/S

### Key Feature

- \* Temperature Accuracy :  $\pm 0.3$  °C
  - \* Temperature Range: -40 ~ 80 °C
  - \* Humidity Accuracy : Typ  $\pm 3$  %RH
  - \* Humidity Range: 0 ~ 96 %RH
  - External Temperature Range: -55 °C ~ 125 °C
  - \*  $\pm 0.5$ °C accuracy from -10°C to +85°C
  - \*  $\pm 2$ °C accuracy from -55°C to +125°C
- Power Input: 2400mAh Li-SOCl2 battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Food Safety
- \* Smart Cold Chain
- \* Smart Cities
- \* Smart Factory

Option



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Outdoor



LHT65N/S

## Sensor Type: LoRaWAN Temperature & Humidity Sensor

Model: LHT65N/S-NE117

### Key Feature

- \* Temperature Accuracy :  $\pm 0.3$  °C
- \* Temperature Range: -40 ~ 80 °C
- \* Humidity Accuracy : Typ  $\pm 3$  %RH
- \* Humidity Range: 0 ~ 96 %RH
- \* External Temperature Sensor:
  - >  $\pm 0.1$  °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
- Power Input: 2400mAh Li-SOCl<sub>2</sub> battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Food Safety
- \* Smart Cold Chain
- \* Smart Cities
- \* Smart Factory

### Option



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LHT65N/S-NE117

## Sensor Type: LoRaWAN Temperature & Humidity Sensor

Model: LHT65N-E31F

### Key Feature

- \* Temperature Accuracy :  $\pm 0.3$  °C
- \* Temperature Range: -40 ~ 80 °C
- \* Humidity Accuracy : Typ  $\pm 3$  %RH
- \* Humidity Range: 0 ~ 96 %RH
- \* External Temperature Accuracy:  $\pm 0.3$  °C
- \* External Temperature Range: -40 ~ 125 °C
- \* External Humidity Accuracy :  $\pm 3$  %RH
- \* External Humidity Range: 0 ~ 96 %RH
- \* External 2 meters long temperature and humidity probe
- Power Input: 2400mAh Li-SOCl<sub>2</sub> battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Food Safety
- \* Smart Cold Chain
- \* Smart Cities
- \* Smart Factory

### Option



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LHT65N-E31F

## Sensor Type: Temperature, Humidity & PIR Sensor

Model: LHT65N-PIR

### Key Feature

- \* Temperature Accuracy :  $\pm 0.3$  °C
- \* Temperature Range: -40 ~ 85 °C
- \* Humidity Accuracy : Typ  $\pm 3$  %RH
- \* Humidity Range: 0 ~ 96 %RH
- \* External PIR Sensor:
  - > Base on RDB223 Sensor
  - > Stable detect distance : 0~3 meter
- Power Input: 2400mAh Li-SOCl<sub>2</sub> battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Food Safety
- \* Smart Cold Chain
- \* Smart Cities
- \* Smart Factory

### Option



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LHT65N-PIR

## Sensor Type: LoRaWAN Temperature, Humidity & Illuminance Sensor

Model: LHT65N/S-E5

### Key Feature

- \* Temperature Accuracy : Typ  $\pm 0.3^{\circ}\text{C}$
  - \* Temperature Range:  $-40 \sim 80^{\circ}\text{C}$
  - \* Humidity Accuracy : Typ  $\pm 3\% \text{RH}$
  - \* Humidity Range:  $0 \sim 96\% \text{RH}$
  - \* External Illuminance Sensor:
    - > Base on BH1750 Illumination Sensor
    - > Range: 0-65535 lx
    - > Operating Range:  $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
- Power Input: 2400mAh Li-SOCl<sub>2</sub> battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Food Safety
- \* Smart Cold Chain
- \* Smart Cities
- \* Smart Factory

### Option



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LHT65N/S-E5



## Sensor Type: Temperature Transmitter

Model: LTC2-xB/xS

### Key Feature

- \* PT100 Temperature Converter
  - \* Max: 2 x monitor temperature channels
  - \* Support 3-wire PT-100
  - \* Temperature alarm
  - \* Datalog Feature
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCl<sub>2</sub> battery

### Application

- \* Medicine Storage
- \* Hospital Application
- \* Smart Cold Chain
- \* Food Safety

### Option



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LTC2-xB/xS



## Sensor Type: LoRaWAN Sensor

Model: T68DL

### Key Feature

- \* Built-in Temperature Sensor
  - \* Temperature Accuracy :  $\pm 0.3^{\circ}\text{C}$
  - \* Temperature Range:  $-40 \sim 85^{\circ}\text{C}$
  - \* Resolution:  $0.01^{\circ}\text{C}$
  - \* Long Term Drift:  $< 0.02^{\circ}\text{C/yr}$
  - \* Waterproof rating: IP68
- Power Input: 2400mAh Li-SOCl<sub>2</sub> battery

### Application

- \* Smart Buildings & Home Automation
- \* Smart Food Safety
- \* Smart Cold Chain
- \* Smart Cities
- \* Smart Factory

### Option



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T68DL



## Sensor Type: LoRaWAN Handheld Food Thermometer

Model: LPT01

Key Feature

Application

Option

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Indoor



- \* LCD displays
  - \* External A-grade PT100 temperature sensor
  - \* Probe length: 13.5cm
  - \* Probe diameter: 4mm
  - \* Class A PT100 collects temperature accuracy  $\pm(0.15 + 0.002 * |t|)^{\circ}\text{C}$ .
  - \* Resolution: 0.01°C
  - \* Operating Range: -50°C to 260°C
  - \* Support wireless OTA update firmware
- Power Input: CR123A 1500mAh Battery

- \* Kitchen
- \* Grill
- \* Oven
- \* BBQ



LPT01

## Sensor Type: Wireless Smart Meat Thermometer with BLE & LoRaWAN

Model: DMT01

Key Feature

Application

Option

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Indoor



- \* Length: 126mm
  - \* Diameter: 6mm
  - \* Food temperature range: -30 ~110 °C , Accuracy:  $\pm 0.5^{\circ}\text{C}$
  - \* Ambient temperature range: 0 ~380 °C , Accuracy:  $\pm 5^{\circ}\text{C}$
  - \* Battery: Li-ion , 3000mAh
  - \* IP Rate: IP67, Dish Washer proof
  - \* Support wireless OTA update firmware
- Power Input: USB Type-C, +5v

- \* Commercial Kitchen
- \* Restaurant
- \* Catering
- \* Food Processing
- \* Central Kitchen
- \* Cloud Kitchen
- \* HACCP Monitoring
- \* Food Safety
- \* Meat Factory
- \* Industrial Cooking



DMT01

## Sensor Type: Temperature Transmitter

Model: LTC1-xB/xS

Key Feature

Application

Option

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Outdoor



- \* PT100 Temperature Converter
  - \* Max: 1 x monitor temperature channels
  - \* Support 3 -wire PT-100
  - \* Temperature alarm
  - \* Datalog Feature
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Medicine Storage
- \* Hospital Application
- \* Smart Cold Chain
- \* Food Safety



LTC1-xB/xS

# Agriculture & Weather Station Series

## Sensor Type: SDI-12 to LoRaWAN/NB-IoT/LTE-M Converter

Model: SDI-12-xB/xS

Key Feature

Application

Option

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- \* Controllable 3.3v, 5v and 12v output to power external sensor
  - \* SDI-12 Protocol to connect to SDI-12 Sensor
  - \* Operating Temperature: -40 ~ 85°C
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

\* Smart Agriculture



SDI-12-xB/xS

## Sensor Type: Soil Moisture & EC Sensor

Model: SE01-xB/xS

Key Feature

Application

Option

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- \* Monitor Soil Moisture
  - \* Monitor Soil Temperature
  - \* Monitor Soil Conductivity
  - \* Operating Temperature: -40 ~ 85°C
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

\* Smart Agriculture



SE01-xB/xS

## Sensor Type: Leaf Moisture Sensor

Model: LMS01-xB/xS

Key Feature

Application

Option

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- \* Monitor Leaf moisture
  - \* Monitor Leaf temperature
  - \* Operating Temperature: -40 ~ 85°C
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

\* Smart Agriculture



LMS01-xB/xS

## Sensor Type: Soil pH Sensor

Model: SPH01-xB/xS

### Key Feature

- \* Monitor soil pH with temperature compensation.
  - \* Monitor soil temperature
  - \* Support pH calibration by end user
  - \* Operating Temperature: -40 ~ 85°C
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

### Application

- \* Smart Agriculture

### Option



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SPH01-xB/xS



## Sensor Type: Weather Station Kit

Model: WSC2-X

### Key Feature

- \* Built-in sensors: Wind Speed, Wind Direction, Temperature, Humidity, Air Pressure, Illumination, PM2.5, PM10 & Noise
  - \* Support reading the Rain Gauge, Wind Speed/Direction, CO2/PM2.5/PM10, Rain/Snow Detect, Temperature, Humidity, Illuminance, Pressure, Total Solar Radiation, PAR
  - \* RS485 Interface for 3rd Sensors
  - \* Pulse Counter Interface
  - \* Support tipping bucket Rain Gauge
  - \* Supports BLE configure and Wireless OTA update
  - \* GNSS for Location Report ( for -CB models only)
- Power Input:** Powered by external 12v battery ; Back up rechargeable 1000mAh Li-ion battery

### Application

- \* Weather Station
- \* Smart Agriculture

### Option



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WSC2-X



## Sensor Type: Weather Station Kit

Model: WSC2-Compact-xS

### Key Feature

- \* Support external 3 in 1 weather sensor (DR-THP-6P): Temperature, Humidity, Air Pressure
  - \* Support interrupt Rain Gauge (DR-RG-6P) and Illuminance Sensor (DR-IL-6P)
  - \* Easy to install, no need for additional MPTT or solar panels
  - \* IP66 Waterproof Enclosure
  - \* Supports BLE configure and Wireless OTA update
  - \* GNSS for Location Report ( for -CS models only)
- Power Input:** Solar + 3000 mAh Li-ion Battery

### Application

- \* Weather Station
- \* Smart Agriculture

### Option



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WSC2-Compact-xS



## Sensor Type: LoRaWAN UVC Radiation Sensor

Model: UV254-LB

Key Feature

Application

Option

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Outdoor



- \* Detect UVC lamp working status
- \* Detect UVC lamp working efficiency
- \* Operating Temperature: -40 ~ 85°C
- \* Probe Spec:
  - > Measuring range: 0 ~ 5mw/cm<sup>2</sup>
  - > Response spectrum range: 254nm±5nm
  - > Peak response spectrum 254nm
- Power Input: Built-in 8500mAh Li-SOCI2 battery

- \* Smart Buildings & Home Automation
- \* Catering Environment
- \* Office Environment
- \* Smart Cities
- \* Smart Factory



UV254-LB

## Sensor Type: LoRaWAN Multi Soil Segment Converter

Model: GroPoint Air-M

Key Feature

Application

Option

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Outdoor



- \* Plug and Play with Gropoint Profile Multi Segment Soil Moisture & Temperature probe
- \* IP66 Waterproof Enclosure
- Power Input: Built-in 8500mAh Li-SOCI2 battery

- \* Smart Agriculture



GroPoint Air-M

## Sensor Type: Soil Moisture & EC Sensor

Model: SE02-xB/xS

Key Feature

Application

Option

Click to See Datasheet

Outdoor



- \* External 2x sensor probes, probe length: 2.5m
- \* Monitor Soil Moisture
- \* Monitor Soil Temperature
- \* Monitor Soil Conductivity
- \* IP66 Waterproof Enclosure
- \* GNSS for Location Report ( for -CB & -CS models only)
- \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

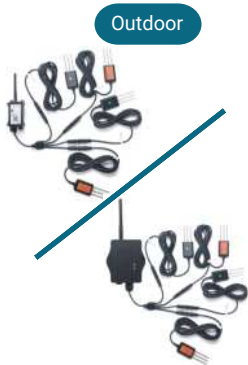
- \* Smart Agriculture



SE02-xB/xS

## Sensor Type: Soil Moisture & EC Transmitter

Model: SE0X-xB/xS



Key Feature

- \* External up to 4 sensor probes, probe length: 3.5m
  - \* Monitor Soil Moisture
  - \* Monitor Soil Temperature
  - \* Monitor Soil Conductivity
  - \* IP66 Waterproof Enclosure
  - \* Operating Temperature: -40 ~ 85°C
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

Application

- \* Smart Agriculture

Option



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[SE0X-xB/xS](#)



# Distance, Pressure, Level Detecting Series

## Sensor Type: Distance Detection Sensor

Model: DDS75-xB/xS

Key Feature

Application

Option

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- \* Distance Detection by Ultrasonic technology
  - \* Flat object range : 28~750 cm
  - \* Blind spot distance : 0 ~ 28cm
  - \* Cable Length : 25cm
  - \* Reference Angle: 40°
  - \* Accuracy:  $\pm(1+S \times 0.3\%)$  cm
  - \* Repeatability less than 5mm
  - \* GNSS for Location Report ( for -CB & -CS models only)
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Bottom water level monitoring
- \* Liquid level measurement



DDS75-xB/xS

## Sensor Type: Distance Detection Sensor

Model: DDS45-xB/xS

Key Feature

Application

Option

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- \* Distance Detection by Ultrasonic technology
  - \* Flat object range: 3 ~ 450cm
  - \* Blind spot distance : 0 ~ 3cm
  - \* Cable Length : 25cm
  - \* Reference Angle: 60°
  - \* Accuracy:  $\pm(1+S \times 0.3\%)$  cm
  - \* Repeatability less than 5mm
  - \* GNSS for Location Report ( for -CB & -CS models only)
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Intelligent trash can management system
- \* Parking monitoring



DDS45-xB/xS

## Sensor Type: Ultrasonic Liquid Level Sensor

Model: DDS20-xB/xS

Key Feature

Application

Option

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- \* Liquid Level Measurement by Ultrasonic technology
  - \* Measure through container, No need to contact Liquid
  - \* Valid level range 20 ~ 2000mm
  - \* Accuracy:  $\pm(5+S \times 0.5\%)$  mm
  - \* Cable Length : 25cm
  - \* GNSS for Location Report ( for -CB & -CS models only)
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Smart liquid control solution
- \* Smart liquefied gas solution



DDS20-xB/xS

## Sensor Type: 4-Channels Distance Detection Sensor

Model: DDS04-xB/xS

### Key Feature

- \* max: 4 x Distance Detect Channels
  - \* Different types of probes can be used together
  - \* Detect Range: Base on External Probe
  - \* Operating Temperature: -40 ~ 85°C
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

### Application

- \* Smart Tank Solution
- \* Smart Trash bins Solution

### Option



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DDS04-xB/xS

## Sensor Type: LoRaWAN Smart Distance Detector

Model: DS20L

### Key Feature

- \* LiDAR distance detector
  - \* Periodically detect or continuously detect mode
  - \* Alarm & Counting mode
  - \* Range: 3 ~ 200cm
  - \* Accuracy:  $\pm 2\text{cm}$  @ (3cm~100cm);  $\pm 5\%$  @ (100~200cm)
  - \* ToF FoV:  $\pm 9^\circ$ , Total  $18^\circ$
  - \* Light source: VCSEL
- Power Input:** Built-in 2400mAh Li-SOCI2 battery or power by external power source

### Application

- \* IoT Rubbish Bin
- \* IoT Toilet

### Option



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DS20L

## Sensor Type: LiDAR ToF Distance Detection Sensor

Model: LDS12-xB/xS

### Key Feature

- \* Laser technology for distance detection
  - \* Measure Distance: 0.1 ~ 12m
  - \* Accuracy:  $\pm 5\text{cm}$ @(0.1-5m),  $\pm 1\%$ @(5m-40m)
  - \* FOV :  $3.6^\circ$
  - \* Operating Temperature: -40 ~ 85°C
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

### Application

- \* Water tank level measurement
- \* Parking Radar Ranging

### Option



[Click to See Datasheet](#)



LDS12-xB/xS

## Sensor Type: LiDAR ToF Distance Detection Sensor

Model: LDS40-xB/xS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* Laser technology for distance detection
  - \* Measure Distance: 0.1 ~40m
  - \* Accuracy :  $\pm 5\text{cm}@ (0.1-5\text{m})$ ,  $\pm 1\%@(5\text{m}-40\text{m})$
  - \* FOV : 3°
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Oil tank liquid level measurement
- \* Granary overflow detection



[LDS40-xB/xS](#)

## Sensor Type: Microwave Radar Distance Sensor

Model: MDS120-xB/xS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* 60Ghz Microwave Radar for distance detection
  - \* Measure Range: 15 ~ 1200cm
  - \* Accuracy:  $\pm (2\text{cm}+\text{SX}0.3\%)$
  - \* Resolution: 1cm
  - \* Measurement Angle: 25 degrees horizontal and 23 degrees vertical
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Sewer Distance Detector
- \* Smart Barn
- \* Liquid Level Measurement



[MDS120-xB/xS](#)

## Sensor Type: Microwave Radar Distance Sensor

Model: MDS200-xB/xS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* 24Ghz Microwave Radar for distance detection
  - \* Measure Range: 0.5 ~ 20m
  - \* Accuracy:  $\pm 0.1\text{m}$
  - \* Resolution: 0.01m
  - \* Measurement Angle : 78 degrees horizontal and 23 degrees vertical
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Supports BLE configure and OTA update
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Sewer Distance Detector
- \* Smart Barn
- \* Liquid Level Measurement



[MDS200-xB/xS](#)

## Sensor Type: Air/Water Pressure Sensor

Model: PS-xB/xS



Key Feature

- \* Measure air / gas or water pressure
  - \* Different pressure range available
  - \* Thread Installation Type or Immersion Type
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

Application

- \* Hydraulic Pressure
- \* Petrochemical Industry
- \* Health and Medical
- \* Food & Beverage Processing
- \* Auto-controlling house
- \* Constant Pressure Water Supply
- \* Liquid Pressure measuring
- \* Liquid & Water Pressure / Level detect

Option



Click to See Datasheet



PS-xB/xS

## Sensor Type: Diferential Pressure Sensor

Model: PS-xB/xS-D



Key Feature

- \* Measure the Diferential Pressure of two input
  - \* Different pressure ranges available ( from 100Pa to 10KPa )
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

Application

- \* Indoor Air Control
- \* Filter Clogging Detect

Option



Click to See Datasheet



PS-xB/xS-D

## Sensor Type: LiDAR ToF Distance Auto-Clean Sensor

Model: LDS25-xB/xS



Key Feature

- \* Laser technology for distance detection
  - \* Self-contained Auto-clean function
  - \* Measure Distance: 0.1m ~ 25m @ 90% Reflectivity; 0.1m ~ 12m @ 10% Reflectivity
  - \* Accuracy :  $\pm 6\text{cm}$ @(0.1m-6m),  $\pm 1\%$ @(6m-25m)
  - \* Resolution: 1cm
  - \* FOV : 3°
  - \* Protection level: IP5X
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmwar
- Power Input:** Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

Application

- \* Horizontal distance measurement
- \* Parking management system
- \* Object proximity and presence detection
- \* Robot obstacle avoidance
- \* Automatic control

Option



Click to See Datasheet



LDS25-xB/xS

# Door & Water Leak Series

## Sensor Type: Door Sensor

Model: DS03A-xB/xS



Key Feature

- \* Door Open/Close detect
  - \* Door Open/Close statistics
  - \* Datalog Feature, Open Alarm Feature
  - \* Probe length: 40cm
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

Application

- \* Supermarket
- \* Warehouse
- \* Garage
- \* Villa
- \* Home Area
- \* Store

Option



Click to See Datasheet



DS03A-xB/xS

## Sensor Type: Open/Close Dry Contact Sensor

Model: CPL03-xB/xS



Key Feature

- \* Door Open/Close detect
  - \* Door Open/Close statistics
  - \* Datalog Feature, Open Alarm Feature
  - \* IP protection level: IP67
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

Application

- \* Gas Meter
- \* Water Meter

Option



Click to See Datasheet



CPL03-xB/xS

## Sensor Type: LoRaWAN Door Sensor

Model: LDS02



Key Feature

- \* Door Open/Close detect
  - \* Door Open/Close statistics
  - \* Uplink on periodically and open/close action
  - \* Remote configure parameters via LoRa Downlink
  - \* Firmware upgradable via program port
- Power Input: 2 x AAA batteries

Application

- \* Wireless Alarm and Security Systems
- \* Home and Building Automation
- \* Industrial Monitoring and Control

Option



Click to See Datasheet



LDS02

## Sensor Type: LoRaWAN Door Sensor

Model: LHT65N/S-DS



### Key Feature

- \* Temperature Accuracy : Typ  $\pm 0.3$  °C
  - \* Temperature Range: -40 ~ 80 °C
  - \* Humidity Accuracy : Typ  $\pm 3$  %RH
  - \* Humidity Range: 0 ~ 96 %RH
  - \* External Door Sensor:
    - > Material: Aluminum Alloy
    - > Detect Distance: ~3cm
    - > Cable Length: 1 meter
- Power Input: 2400mAh Li-SOCI2 battery

### Application

- \* Supermarket
- \* Warehouse
- \* Garage
- \* Villa
- \* Home Area
- \* Store

### Option



[Click to See Datasheet](#)



LHT65N/S-DS

## Sensor Type: LoRaWAN Dry Contact Sensor

Model: LHT65N/S-DC



### Key Feature

- \* Temperature Accuracy : Typ  $\pm 0.3$  °C
  - \* Temperature Range: -40 ~ 80 °C
  - \* Humidity Accuracy : Typ  $\pm 3$  %RH
  - \* Humidity Range: 0 ~ 96 %RH
  - \* External Probe:
    - > 3 wire: VCC/ GND/ INT
- Power Input: 2400mAh Li-SOCI2 battery

### Application

- \* Door Sensor
- \* Water Leak
- \* Level Detect
- \* PIR
- \* Flow Sensor
- \* Laser Switch

### Option



[Click to See Datasheet](#)



LHT65N/S-DC

## Sensor Type: Flow Sensor

Model: SW3L-xB/xS



### Key Feature

- \* Upload water flow volume
  - \* Monitor water waste
  - \* Support Datalog Feature, Alarm Feature
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

### Application

- \* Flow Sensor application
- \* Water Control
- \* Toilet Flow Sensor
- \* Monitor Waste water

### Option



[Click to See Datasheet](#)



SW3L-xB/xS

## Sensor Type: None-Position Rope Type Water Leak Controller

Model: WL03A-xB/xS

Key Feature

Application

Option

Click to See Datasheet



- \* Water Leak detect
  - \* Support Datalog Feature, Alarm Feature
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* IDC
- \* Smart Building
- \* Smart Factory
- \* Warehouse
- \* Air Condition
- \* Industrial Piping



WL03A-xB/xS

## Sensor Type: LoRaWAN Water Leak Sensor

Model: LWL02

Key Feature

Application

Option

Click to See Datasheet



- \* Water Leak detect
  - \* Uplink on periodically and open/close action
  - \* Remote configure parameters via LoRa Downlink
  - \* Firmware upgradable via program port
  - \* Storage & Operation Temperature: -10 ~ 50 °C or -40 ~ 60 °C
- Power Input: 2 x AAA batteries

- \* Washing Room
- \* Store
- \* Kitchen
- \* Heating



LWL02

## Sensor Type: LoRaWAN Push Button

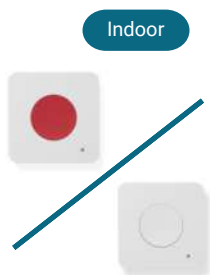
Model: PB01

Key Feature

Application

Option

Click to See Datasheet






- \* 1 x push button. Different Color available.
  - \* Built-in Temperature & Humidity sensor
  - \* Built-in speaker
  - \* Temperature Accuracy : Typ  $\pm 0.2$  °C
  - \* Temperature Range: -10 ~ 50 °C or -40 ~ 60 °C
  - \* Humidity Accuracy : Typ  $\pm 1.8\%$  RH
  - \* Humidity Range: 0 ~ 99% RH(no Dew)
- Power Input: 2 x AAA batteries

- \* Smart Buildings & Home Automation
- \* Logistics and Supply Chain Management
- \* Smart Metering
- \* Smart Agriculture
- \* Smart Cities
- \* Smart Factory






PB01

## Sensor Type: LoRaWAN Water Leak Sensor

Model: LWL04	Key Feature	Application	Option	Click to See Datasheet
 <p>Indoor</p>	<ul style="list-style-type: none"> <li>* Water Leak detect</li> <li>* IP65 waterproof</li> <li>* Uplink on periodically and water leak event</li> <li>* Support wireless OTA update firmware</li> </ul> <p>Power Input: CR123A 1500mAh batteries</p>	<ul style="list-style-type: none"> <li>* Smart Factory</li> <li>* Smart Buildings &amp; Home Automation</li> </ul>		 <p>LWL04</p>

## Sensor Type: LoRaWAN Push Buttons

Model: PB05-L	Key Feature	Application	Option	Click to See Datasheet
 <p>Indoor</p>	<ul style="list-style-type: none"> <li>* 5 x push buttons</li> <li>* Built-in speaker</li> <li>* IP Rating: IP52</li> <li>* Power Consumption: Idle: 5uA, Transmit: max 110mA</li> <li>* Storage &amp; Operation Temperature: -10 ~ 50 °C or -40 ~ 60 °C</li> </ul> <p>Power Input: 2 x AA LR6 batteries</p>	<ul style="list-style-type: none"> <li>* Smart Factory</li> <li>* Smart Buildings &amp; Home Automation</li> </ul>		 <p>PB05-L</p>

# Water & Air Quality Series

## Sensor Type: Water Quality Sensor Transmitter

Model: WQS-xB/xS

Key Feature

Application

Option

[Click to See Datasheet](#)

Outdoor



- \* Measure water quality and provide information for water quality conditions
  - \* Low power consumption
  - \* Support EC/PH/DO/ORP/TS/CL Type Water Quality Probe
  - \* Support 1 ~ 3 probes
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Probe IP Level: IP68
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCl2 battery

- \* Wastewater Monitoring
- \* Environmental Water Monitoring
- \* General Water Treatment
- \* Tap Water
- \* Industrial Production
- \* Chemical Reaction
- \* Industrial Water
- \* Surface Water



WQS-xB/xS

## Sensor Type: LoRaWAN Indoor CO2 Sensor

Model: AQS01-L

Key Feature

Application

Option

[Click to See Datasheet](#)

Indoor



- \* Monitor CO2/Temperature/Relative Humidity/Pressure
  - \* Support CO2 alarm
  - \* Support Datalog Feature
  - \* Support Bluetooth v5.1 remote configure and wireless OTA update firmware
- Power Input: 4000mAh Li-SOCl2 battery

- \* Supermarket
- \* Wine Cellar
- \* Children Room
- \* School
- \* Ofce
- \* Gym



AQS01-L

# LoRaWAN Gateway Series

## Sensor Type: Indoor Single Channel LoRa Gateway

Model: LG01v2

Key Feature

Application

Option

[Click to See Datasheet](#)



Indoor

- \* Single Channel Peer to Peer LoRa Gateway
  - \* Open Source Debian system
  - \* CPU: Quad-Core Cortex-A7, 1.2Ghz
  - \* RAM 512MB, eMMC: 4GB
  - \* Built-in Node-Red local Application server
- Power Input: 5V DC, 2A, Type C

- \* Smart Cities
- \* Smart Factory
- \* Smart Buildings & Home Automation
- \* Logistics and Supply Chain Management
- \* Smart Metering
- \* Smart Agriculture



LG01v2

## Sensor Type: Indoor Multi-Channel LoRaWAN Gateway

Model: LPS8N

Key Feature

Application

Option

[Click to See Datasheet](#)



Indoor

- \* Open Source OpenWrt system
  - \* Managed by Web GUI, SSH via WAN or WiFi
  - \* Remote access with Reverse-SSH or remote.it
  - \* Emulates 49x LoRa demodulators
  - \* 10 programmable parallel demodulation paths
  - \* Pre-configure to support different LoRaWAN regional settings
  - \* Allow to customize LoRaWAN regional parameters.
  - \* Support Local decode ABP end node info and transfer to MQTT server
  - \* Support different level log in
  - \* Support Semtech Packet Forwarder
  - \* Support LoRaWAN basic station.
  - \* Optional 3G/4G cellular connection
- Power Input: 5V DC, 2A, Type C

- \* Smart Cities
- \* Smart Factory
- \* Smart Buildings & Home Automation
- \* Logistics and Supply Chain Management
- \* Smart Metering
- \* Smart Agriculture



LPS8N

## Sensor Type: Indoor Multi-Channel LoRaWAN Gateway

Model: LPS8v2



Key Feature

- \* Open Source Debian system
  - \* Managed by Web GUI, SSH via WAN or WiFi
  - \* Remote Management
  - \* Auto-provisioning for batch deployment and management
  - \* 10 programmable parallel demodulation paths
  - \* Pre-configured to support different LoRaWAN regional settings
  - \* Allow customizing LoRaWAN regional parameters.
  - \* Different kinds of LoRaWAN Connections such as:
    - > Semtech UDP Packet Forwarder
    - > LoRaWAN Basic Station
    - > ChirpStack-Gateway-Bridge (MQTT)
  - \* Built-in ChirpStack local LoRaWAN server
  - \* Built-in Node-Red local Application server
- Power Input: 5V DC, 2A, Type C

Application

- \* Smart Cities
- \* Smart Factory
- \* Smart Buildings & Home Automation
- \* Logistics and Supply Chain Management
- \* Smart Metering
- \* Smart Agriculture

Option



Click to See Datasheet



LPS8v2

## Sensor Type: Indoor Multi-Channel LoRaWAN To Modbus Gateway

Model: MS48-LR



Key Feature

- \* Open Source Debian system
  - \* Managed by Web GUI, SSH via WAN or WiFi
  - \* Remote Management
  - \* Auto-provisioning for batch deployment and management
  - \* 10 programmable parallel demodulation paths
  - \* Pre-configured to support different LoRaWAN regional settings
  - \* Allow customizing LoRaWAN regional parameters.
  - \* Different kinds of LoRaWAN Connections such as:
    - > Semtech UDP Packet Forwarder
    - > LoRaWAN Basic Station
    - > ChirpStack-Gateway-Bridge (MQTT)
  - \* Built-in ChirpStack local LoRaWAN server
  - \* Built-in Node-Red local Application server
  - \* Act as Modbus Slave mode
- Power Input: 12V, 2A, DC

Application

- \* Smart Cities
- \* Smart Factory
- \* Smart Buildings & Home Automation
- \* Logistics and Supply Chain Management
- \* Smart Metering
- \* Smart Agriculture

Option



Click to See Datasheet






MS48-LR

## Sensor Type: Indoor Multi-Channel LoRaWAN Gateway

Model: LG308N	Key Feature	Application	Option	Click to See Datasheet
<p>Indoor</p> 	<ul style="list-style-type: none"> <li>* Open Source Linux system</li> <li>* Managed by Web GUI, SSH via WAN or WiFi</li> <li>* Emulates 49x LoRa demodulators</li> <li>* 10 programmable parallel demodulation paths</li> </ul> <p>Power Input: External 12V, 2A, DC</p>	<ul style="list-style-type: none"> <li>* Smart Cities</li> <li>* Smart Factory</li> <li>* Smart Buildings &amp; Home Automation</li> <li>* Logistics and Supply Chain Management</li> <li>* Smart Metering</li> <li>* Smart Agriculture</li> </ul>		 <p>LG308N</p>

## Sensor Type: Outdoor Multi-Channel LoRaWAN Gateway

Model: DL0S8N	Key Feature	Application	Option	Click to See Datasheet
<p>Outdoor</p> 	<ul style="list-style-type: none"> <li>* Open Source Embedded Linux system</li> <li>* Managed by Web GUI, SSH via LAN or WiFi</li> <li>* Support Semtech UDP packet forwarder</li> <li>* Support LoRaWAN Station Connection</li> <li>* Support MQTTS</li> <li>* Cellular Failover connection(option)</li> <li>* Direct Communication to LoRaWAN ABP Node</li> <li>* LoRaWAN packet filtering</li> <li>* Far seeing LED indicator</li> <li>* Built-in GPS module for location &amp; timing</li> <li>* External fiber glass antenna</li> <li>* Auto-Provision</li> <li>* Remote Monitoring</li> <li>* 802.3af PoE</li> <li>* IP65</li> <li>* Lighting Protection</li> <li>* Power Consumption:12v ,300-500mA</li> <li>* Operating Temperature : -20~85°C</li> </ul> <p>Power Input: 12V, 2A, DC</p>	<ul style="list-style-type: none"> <li>* Smart Cities</li> <li>* Smart Factory</li> <li>* Smart Buildings &amp; Home Automation</li> <li>* Logistics and Supply Chain Management</li> <li>* Smart Metering</li> <li>* Smart Agriculture</li> </ul>		 <p>DL0S8N</p>

# Developing Board & Education Kits Series

## Sensor Type: Multi-Channel LoRaWAN Concentrator

Model: PG1302

Key Feature

Application

Option

Click to See Datasheet



- \* Base on Semtech SX1302 solution
- \* Support Raspberry Pi 3B/3B+/4, TinkerBoard2/2S, Orange Pi Pc/PC PLUS.
- \* Up to -140dBm sensitivity
- \* Support 3.3v and 5v.
- \* Mini-PCle Interface
- \* Converter board to support Raspberry Pi
- \* Power Input: 5v, 1A

- \* DIY LoRaWAN Gateway
- \* Customized LoRaWAN Gateway hardware solution



PG1302

## Sensor Type: LoRaWAN Module

Model: LA66

Key Feature

Application

Option

Click to See Datasheet



- \* Support LoRaWAN v1.0.3 protocol
- \* Support peer-to-peer protocol
- \* TCXO crystal to ensure RF performance on low temperature
- \* SMD Antenna pad and i-pex antenna connector
- \* Available in different frequency LoRaWAN frequency bands.
- \* AT Command via UART-TTL interface
- \* Firmware upgradable via UART interface
- \* Ultra-long RF range
- \* Input Power Range: 1.8v ~ 3.7v

- \* DIY Project
- \* Customized LoRaWAN hardware solution



LA66

## Sensor Type: LoRaWAN Shield for Arduino

Model: LA66 LoRaWAN Shield

Key Feature

Application

Option

Click to See Datasheet



- \* Arduino Shield base on LA66 LoRaWAN module
- \* Support LoRaWAN v1.0.3 protocol
- \* Support peer-to-peer protocol
- \* TCXO crystal to ensure RF performance on low temperature
- \* SMA connector
- \* Available in different frequency LoRaWAN frequency bands.
- \* AT Command via UART-TTL interface
- \* Firmware upgradable via UART interface
- \* Ultra-long RF range
- \* Input Power Range: 1.8v ~ 3.7v

- \* DIY Project
- \* Customized LoRaWAN hardware solution



LA66 LoRaWAN Shield

## Sensor Type: LA66 USB LoRaWAN Adapter

**Model: LA66 USB  
LoRaWAN Adapter v2**



**Key Feature**

- \* LoRaWAN USB adapter base on LA66 LoRaWAN module
- \* Ultra-long RF range
- \* Support LoRaWAN v1.0.3 protocol
- \* Support peer-to-peer protocol
- \* TCXO crystal to ensure RF performance on low temperature
- \* Spring RF antenna
- \* Available in diferent frequency LoRaWAN frequency bands.
- \* AT Command via UART-TTL interface
- \* Firmware upgradable via UART interface
- \* Open Source Mobile App for LoRaWAN signal detect and GPS tracking.

**Application**

- \* DIY Project
- \* Evaluation board for LoRaWAN network
- \* Smart Factory
- \* Smart Buildings & Home Automation

**Option**



[Click to See Datasheet](#)



[LA66 USB LoRaWAN Adapter v2](#)

## Sensor Type: LoRa / LoRaWAN Evaluation Kit

**Model: LoRaWAN IoT  
Kit v3**



**Key Feature**

- \* Open Source LoRa/LoRaWAN kits with sensors and gateway
- \* Support multi-channel LoRaWAN and Single-Channel LoRa
- \* Support various network structures
- \* Include LoRaWAN server and Application Server

**Application**

- \* Education / Evaluation kit for LoRa and LoRaWAN Network

**Option**



[Click to See Datasheet](#)



[LoRaWAN IoT Kit v3](#)

## Other Series

### Sensor Type: Tilting Sensor

Model: TS01-xB/xS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* Detect pitch and roll angle
  - \* Support Angle Alarm
  - \* Support Datalog feature
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Building Detecting
- \* Engineering Detecting
- \* Tree Bending Monitoring
- \* Landslide Monitoring



TS01-xB/xS

### Sensor Type: LoRaWAN Load Cell Converter

Model: LCC01-LB/LS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* Standard 4-wire interface to 3rd party load cell
  - \* Weigh Measurement, scale from 100g to 10T
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Hopper Weighting
- \* Packing Machine
- \* Weighbridge
- \* Tank Silo Weighting
- \* Test Machine
- \* Crane Scales
- \* Truck Scales
- \* Railroad Scales



LCC01-LB/LS

### Sensor Type: 4 Channels Current Sensor Converter

Model: CS01-xB/xS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* Supports maximum 4 current sensors
  - \* Support various current sensor Ratio: 100A, 300A, 600A.
  - \* Monitor the machine running status
  - \* Analyze power consumption trends
  - \* Current Alarm
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery

- \* Wireless Alarm and Security Systems
- \* Home and Building Automation
- \* Industrial Monitoring and Control



CS01-xB/xS

## Sensor Type: LoRaWAN Tracker

Model: TrackerD

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* ESP32 PICO D4
  - \* SX1276/78 Wireless Chip
  - \* Arduino IDE Compatible
  - \* Open source hardware / software
  - \* Regular/ Real-time GPS,BLE,WIFI tracking
  - \* Built-in3 axis accelerometer (LIS3DH)
  - \* Humidity / temperature sensor : GXCAS Technology GXHT3X
  - \* Motion sensing capability
  - \* Power Monitoring
  - \* Charging circuit via USB port
  - \* Tri-color LED, Alarm button
  - \* Datalog
- Power Input: 1000mA Li-SOCI2 battery

- \* Human tracking
- \* Logistics and Supply Chain Management



TrackerD

## Sensor Type: LoRaWAN Asset Tracker

Model: TrackerD-LS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* ESP32 PICO D4
  - \* SX1276/78 Wireless Chip
  - \* Arduino IDE Compatible
  - \* Open source hardware / software
  - \* Regular/ Real-time GPS tracking
  - \* Built-in3 axis accelerometer.
  - \* Motion sensing capability
  - \* Power Monitoring
  - \* Charging circuit via USB port
  - \* Datalog
- Power Input: 3000mA Rechargeable Li-ion Battery + Solar Panel

- \* Logistics and Supply Chain Management



TrackerD-LS

## Sensor Type: AI Image End Node

Model: AIS01-xB/xS

Key Feature

Application

Option

[Click to See Datasheet](#)



- \* AI Image Sensor
  - \* Mono: black & white
  - \* Angle: 110°
  - \* Image size: 64kb
  - \* Image resolution: 640x480
  - \* Send image to IoT server
  - \* Recognize digits from Image and send data to IoT server
  - \* Trained for common reading for Water Meter, Gas Meter, Power Meter
  - \* GNSS for Location Report ( for -CB & -CS models only)
  - \* Support Bluetooth v5.1 remote configure and OTA update firmware
- Power Input: Solar panel with Li-ion battery; Built-in 8500mAh Li-SOCI2 battery



- \* Gas Meter
- \* Water Meter
- \* Electricity Meter



AIS01-xB/xS

# Touch Screen Series

## Sensor Type: LoRa/LoRaWAN HMI Touch Screen

Model: LTS5	Key Feature	Application	Option	Click to See Datasheet
 <p>Indoor</p>	<ul style="list-style-type: none"> <li>* Dragino LA66 LoRa Module</li> <li>* Support WiFi &amp; BLE wireless protocol</li> <li>* Support Private LoRa protocol or LoRaWAN protocol</li> <li>* ESP32-WROOM MCU: 8MB RAM &amp; 16MB ROM</li> <li>* 5.0" HMI touch screen</li> <li>* Support RS485 Interface</li> <li>* Support LVGL case. SquareLine program.</li> <li>* Open Source Project</li> <li>* IP Rating: IP52</li> </ul> <p>Power Input: External 5V DC power adapter</p>	<ul style="list-style-type: none"> <li>* Smart Buildings &amp; Home Automation</li> <li>* Smart Metering</li> <li>* Smart Cities</li> <li>* Smart Agriculture</li> <li>* Logistics and Supply Chain Management</li> <li>* Smart Factory</li> </ul>		 <p>LTS5</p>



## Accessories Series

### Sensor Type: Bluetooth BLE iBeacon

Model: BCN02

Outdoor



Key Feature

- \* 1200mAh battery
- \* 4~5 year battery life(Default 500ms Interval)
- \* Distance,100meters in open area
- \* RF power: -19.5 ~ 2.5dBm (default 2.5dBm)
- \* Operating temperature: -30~60 °C
- \* Valid for outdoor use, Weather Proof
- \* Configurable via mobile phone
- \* Sleep 0.27uA, Broadcasting: 16uA

Application

- \* Smart Logistics and Supply Chain Management
- \* Smart Human tracking

Option



Click to See Datasheet



BCN02

### Sensor Type: Temperature Buffer

Model: Temperature Buffer [Introduce](#)



- \* Temperature Buffer is used to avoid spike temperature sampling. To get a result closer to the real object.
- \* The Dragino Temperature Buffer includes a plastic box with soda-lime glass beads and metal fixture.
- \* soda-lime glass beads 0.8 ~ 1mm.

### Sensor Type: LoRaWAN Relay

Model: LC01

Indoor



Key Feature

- \* Dual Terminal Design: Equipped with two input and two output terminals for easy power connection.
- \* LoRaWAN® Class C: Operates in Class C mode for low-latency communication and continuous listening.
- \* Log function and key reset function
- \* Voltage: 80 ~ 275V AC
- \* Current : 15A Resistive load

Application

- \* Greenhouse Lighting
- \* Smart Factory
- \* Hotel
- \* Warehouse

Option



Click to See Datasheet



LC01

## Sensor Type: LoRaWAN Wireless Remote Control

Model: LC03

Indoor



### Key Feature

- \* US standard socket
- \* Detect machine plug/unplug status
- \* Support Downlink and Timing control relay opening and closing
- \* Log function and key reset function
- \* Voltage: 80 ~ 275V AC
- \* Current : 15A Resistive load

### Application

- \* Smart Cities
- \* Smart Factory
- \* Smart Buildings
- \* Home Automation

### Option



[Click to See Datasheet](#)



LC03

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