# **LEO-S57**

#### **LoRaWAN Temperature Probe Sensor**



#### **Features**

- 3 wire connection for high precision
- LoRaWAN technology for efficient long-range wireless data transmissions
- IP67 waterproof enclosure for harsh environment applications
- Built-in 19000 mAh replaceable battery and long battery without replacement
- Equipped with NFC for easy configuration
- Compliant with standard LoRaWAN® gateways and network servers

## **Specifications**

Frequency		US915/AU915/KR920/AS923/CN470
NFC		Y(Configuration)
Button		1 x Power Button (Internal)
Battery		1 x 19000 mAh battery (ER34615)
Battery Life		5 years (10 min interval, @25°C)*
Working Temperature		-30°C ~ 70°C
Working Humidity		0 ~ 100% (non-condensing) at 25°C (77°F)
Wireless Range		100 meters+ (Line of Sight)*
dimension		105.4 x 71 x 69.5 mm (4.1 x 2.8 x 2.7 in)
Weight (KG)		1kg
IP		67
Certification		FCC, TELEC, CE**
Connection Type		3-wire connection
Cable Length		1.5m
Probe Type		Stainless steel 304
	Range	-200 °C ~ 50 °C
Temperature	Accuracy	±0.5°C
	Resolution	0.1°C

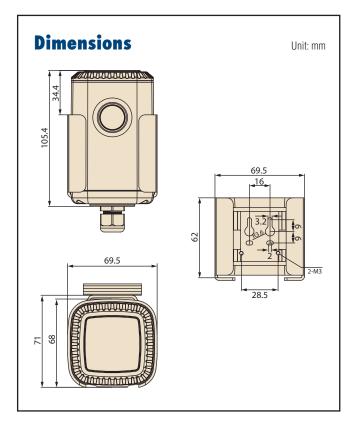
<sup>\*</sup> Test under laboratory conditions and for guideline purposes only

## **Ordering Information**

Part Number	Description
LEO-S572-TPG0	LEO-S LoRaWAN Temp Probe sensor 915
LEO-S572-TPC0	LEO-S LoRaWAN Temp Probe sensor 470

## **Packing List**

- 1 x Mounting Bracket
- 2 x Wall Mounting Kits
- 4 x Rubber Screw Caps
- 1 x Hose Clamp



<sup>\*\*</sup>CE by project

# USM-S67

#### **LoRaWAN Gateway**



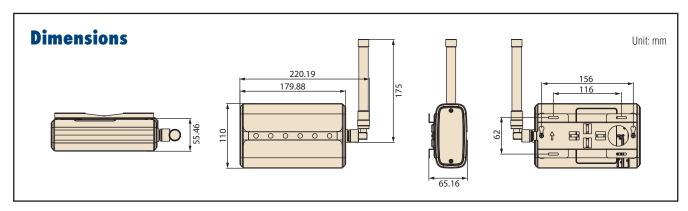
#### **Features**

- Quad-core industrial processor with big memory
- Equip with SX1302 chip, handling a higher amount of traffic with lower consumption
- 8 half/full-duplex channels
- IP65 enclosure and industrial design for parts of outdoor environment applications like eaves
- Desktop, wall or pole mounting
- Multi backhaul backups with Ethernet and Wi-Fi
- Easy and centralized management of remote devices
- Enable security communication with multiple VPNs like IPsec/OpenVPN/ L2TP/PPTP/DMVPN
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration
- Embedded Python SDK for users secondary development
- Fast and user-friendly programming by Node-RED development tool

### **Specifications**

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	CPU	Quad-core 1.5 GHz, 64-bit ARM Cortex-A53
Canaral	Memory	512 MB DDR4
General	Flash	8 GB eMMC
	LED Indicators	1 x POWER, 1 x STATUS, 1 x LoRa, 1 x Wi-Fi, 1 x Ethernet
	Frequecny	US915/AU915/KR920/AS923/CN470
	Antenna	2 x Internal Antennas
LoRaWAN	Antonna	1 x External Antenna
	Wireless Range	100 meters+ (Line of sight)**
	Connect Q'ty	Support up to 100 x LEO-S sensors*
Connectivity	Ethernet	10/100/1000 Base-T
Confidential	Wifi	IEEE 802.11 b/g/n, 2.4GHz
	Button	1 x Reset Button
	Power	1. DC Jack Connector for 9-24 V <sub>DC</sub> power supply
	1 OWG	2. 1 x 802.3 af PoE input
	Working Temperature	-40 ~ 70°C (-40 ~ 158°F)
Others	Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)
	Operating Humidity	0 ~ 95% (non-condensing) at 25°C (77°F)
	dimension	180 x 110 x 56.5 mm (7.09 x 4.33 x 2.22 in)
	IP	65
	Certification	CE, FCC

<sup>\*</sup> Dependent on usage scenario \*\* Test under laboratory conditions and for guideline purposes onl



# **Ordering Information**

Part Number	Description
USM-S67-G0WP0	USM-S67 LoRaWAN & WIFI Gateway 915
USM-S67-C0WP0	USM-S67 LoRaWAN & WIFI Gateway 470

### **Packing List**

- 6 x Screw
- 1 x Rear bracket
- 1 x LAN cable (1.5M)

# USM-S67

### **Compact LoRaWAN Gateway**



#### **Features**

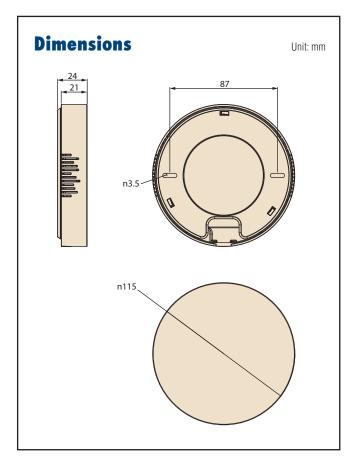
- Compact LoRaWAN Gateway
- Support 8 half/full-duplex channels
- Enable security communication with multiple VPNs( IPsec/OpenVPN/L2TP/ PPTP/DMVPN)
- Detect and analyze the noise level and provide intuitive diagram for deployment
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration

# **Specifications**

	CPU	528 MHz, ARM Cortex-A7
General	Memory	256 MB DDR4
General	Flash	4 GB eMMC
	LED Indicators	1 x SYS, 1 x LoRa
	Frequecny	US915/AU915/KR920/AS923/CN470
LoRaWAN	Antenna	2 x Internal Antennas
LUKAWAN	Wireless Range	100 meters+ (Line of sight)**
	Connect Q'ty	Support up to 20 x LEO-S sensors*
Connectivity	Ethernet	10/100 Base-T
	Button	1 x Reset Button
	Power	1.802.3 af PoE input 2.5V/1A by Type-C Port
	Working Temperature	-20 ~ 50°C (-4 ~ 122°F)
Others	Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)
	Operating Humidity	0 ~ 95% (non-condensing) at 25°C (77°F)
	dimension	Ø115 x 21 mm (Ø4.52 x 0.83 in)
	IP	30

# **Ordering Information**

Part Number	Description
USM-S67-G00P0	USM-S67 LoRaWAN Gateway 915
USM-S67-C00P0	USM-S67 LoRaWAN Gateway 470



<sup>\*</sup> Dependent on usage scenario \*\* Test under laboratory conditions and for guideline purposes only