

# LEO-S592-TP

## LoRaWAN Insertion Temperature Sensor



### Features

- Food-grade stainless-steel probe and shell material for efficient and safe detection
- IP67 and IK10 rated for harsh environment
- Built-in 4000 mAh replaceable battery and long battery life
- Integrated and compact design for wireless deployment
- Built-in NFC for easy configuration
- Compatible with standard LoRaWAN® gateways and network servers

### Specifications

Frequency	US915/AU915/KR920/AS923/ RU864/IN865/EU868/CN470	
NFC	Y (Configuration)	
Button	1 x Power Button (Internal)	
Battery	1 x 4000 mAh battery (ER18505)	
Battery Life	1 year (10 min interval, @25°C)*	
Data Storage Capacity	1200	
Working Temperature	-30°C~ 70°C	
Working Humidity	0 ~ 95% (non-condensing) at 25°C (77°F)	
Wireless Range	100 meters+ (Line of Sight)*	
Dimensions (W x D x H)	Probe: $\Phi$ 7 x 400 mm Node: $\Phi$ 92 x 26 mm	
Weight	330g	
IP	67	
Impact Protection	IK10 (Transceiver)	
Certifications	FCC, CE	
Probe Type	Stainless steel 316	
Temperature	Measurement Range	-30°C ~ 70°C
	Accuracy Range	$\pm$ 0.5 °C
	Resolution	0.01 °C

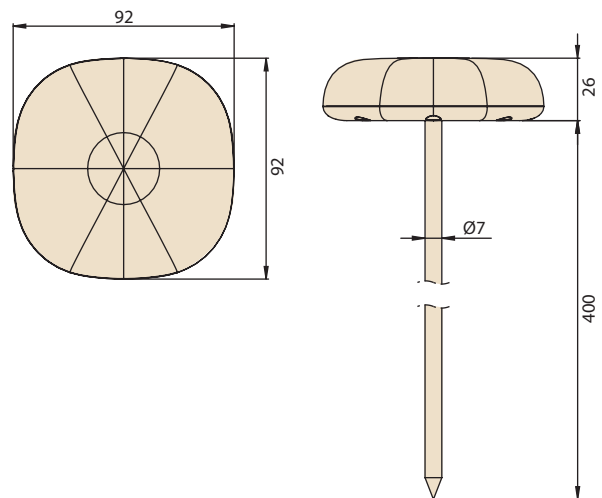
\* Test under laboratory conditions and for guideline purposes only

### Ordering Information

Part Number	Description
LEO-S592-TPG0	LEO-S LoRaWAN Insertion Temperature Sensor 915
LEO-S592-TPC0	LEO-S LoRaWAN Insertion Temperature Sensor 470
LEO-S592-TPE0	LEO-S LoRaWAN Insertion Temperature sensor 868

### Dimensions

Unit: mm



# 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

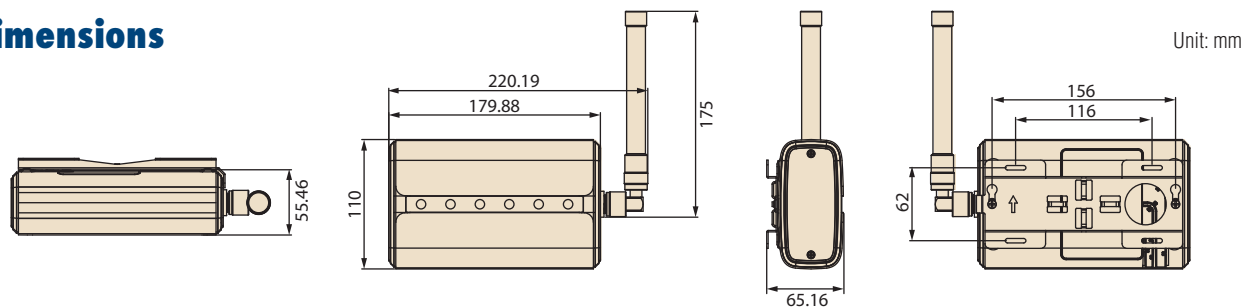
### Specifications

General	CPU	Quad-core 1.5 GHz, 64-bit ARM Cortex-A53
	Memory	512 MB DDR4
	Flash	8 GB eMMC
	LED Indicators	1 x POWER, 1 x STATUS, 1 x LoRa, 1 x Wi-Fi, 1 x Ethernet
LoRaWAN	Frequencny	US915/AU915/KR920/AS923/RU864/IN865/EU868/CN470
	Antenna	2 x Internal Antennas 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
	Wifi	IEEE 802.11 b/g/n, 2.4GHz
Others	Button	1 x Reset Button
	Power	1. DC Jack Connector for 9-24 V <sub>DC</sub> power supply 2. 1 x 802.3 af PoE input
	Working Temperature	-40 ~ 70°C (-40 ~ 158°F)
	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	FCC, TELECOM, CE, KC, RCM, SIRIM, NBTC	

\* Dependent on usage scenario

\*\* Test under laboratory conditions and for guideline purposes onl

### Dimensions



### Ordering Information

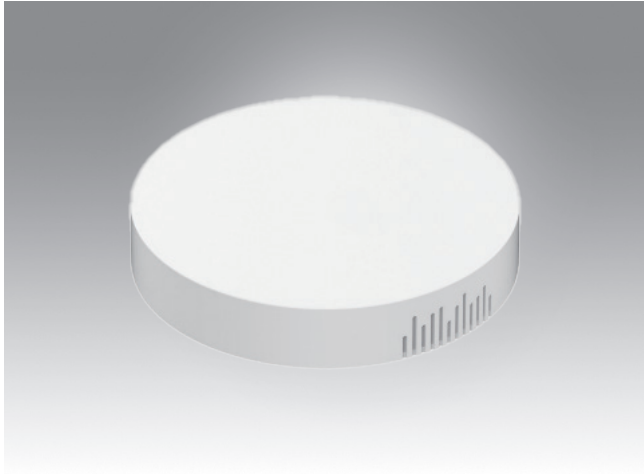
Part Number	Description
USM-S67-G0WPO	USM-S67 LoRaWAN & WIFI Gateway 915
USM-S67-C0WPO	USM-S67 LoRaWAN & WIFI Gateway 470
USM-S67-E0WPO	USM-S67 LoRaWAN & WIFI Gateway 868

### Packing List

- 1 x LAN Cable(1.5M)
- 1 x Adapter
- 1 x Mounting Bracket
- 2 x Mounting Kits
- 1 x LoRaWAN Antenna

# USM-S67

## LoRaWAN Compact Gateway



### Features

- 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

General	CPU	528 MHz, ARM Cortex-A7
	Memory	256 MB DDR4
	Flash	4 GB eMMC
	LED Indicators	1 x SYS, 1 x LoRa
LoRaWAN	Frequency	US915/AU915/KR920/AS923/CN470
	Antenna	2 x Internal Antennas
	Wireless Range	100 meters+ (Line of sight)**
Connectivity	Connect Q'ty	Support up to 20 x LEO-S sensors*
Others	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)
	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
Certification	FCC, TELEC, CE***	

\* Dependent on usage scenario

\*\* Test under laboratory conditions and for guideline purposes only

\*\*\*CE by project

### Ordering Information

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

### Packing List

- 2 x Mounting Kits

### Dimensions

Unit: mm

