

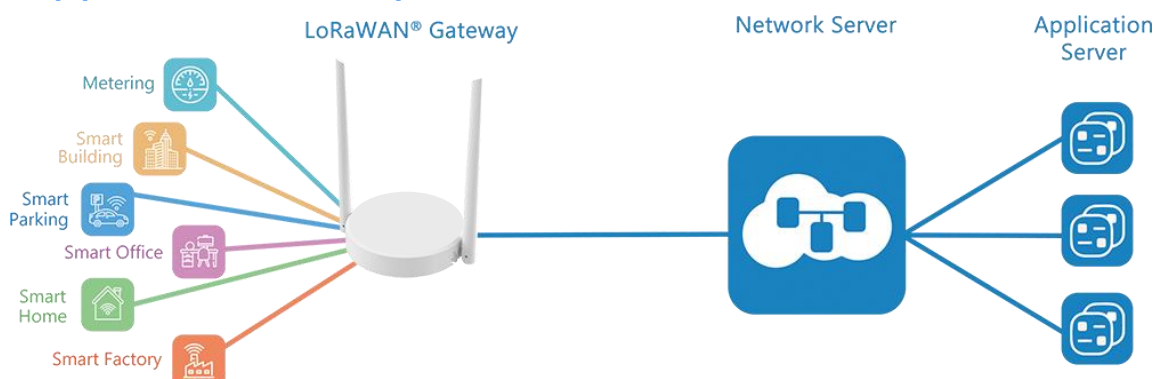
NI63

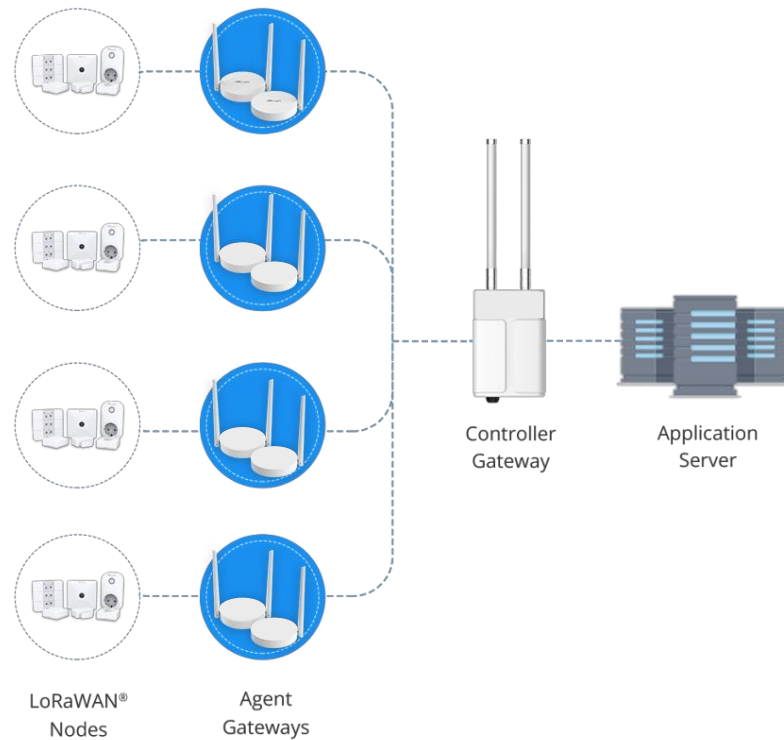
LoRaWAN® Gateway



NI63 is a 8-channel lightweight indoor LoRaWAN® gateway. Adopting, SX1302 chip, UG63 can set up packet forwarding connection between end nodes and mainstream network servers (such as TTN, Chirpstack, etc.). With its compact size and high performance, it is highly suitable for independent deployment of LoRaWAN® networks in small-scale scenarios or single spaces. It can also serve as a supplementary gateway, along with NI65/NI67 or other main gateways, to enhance LoRaWAN® signal coverage in large-scale scenarios by filling in signal blind spots. It is an ideal supplement for wide indoor areas such as office, parking lots, campuses, etc.

◆ Application Example





***Note:** This shows the blind-filling function among gateways.

◆ Features

- Equip with SX1302 chip, handing a higher amount of traffic with lower consumption
- 8 half-duplex channels for more than 2000 end-nodes connections
- Small in size for easy carrying & deployment
- Desktop, wall or ceiling mounting support
- Multi backhaul backups with Ethernet and Cellular (4G)
- Cover the blind spot of LoRaWAN® network by transmitting data to NI56/NI65/NI67 controller gateway
- High cost performance, suitable for small applications
- Compatible with mainstream network servers like The Things Industries, ChirpStack, AWS IoT Core for LoRaWAN® and etc.

◆ Specifications

Hardware System

CPU	Dual-core 240MHz, 32-bit Xtensa® LX7
Memory	8 MB PSRAM

Flash 16 MB Flash

LoRaWAN®

Antenna Connector 1 × External Antenna

Channel 8 (Half-duplex)

Frequency Band CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4

Sensitivity -140dBm Sensitivity @292bps

Output Power 27dBm Max

Protocol V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C

Cellular Interface (Optional)

Network 4G LTE (CAT 1)/GSM

Antenna 1 × External Antenna

L08GL (Global except North America):
 LTE-FDD: B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28/66
 LTE-TDD: B34/38/39/40/41;
 GSM: B2/3/5/8

L09NA (North America):
 LTE-FDD: B2/4/5/12/13/66

SIM Slots 1 (Micro SIM-3FF)

Ethernet Interface

Port 1 × RJ45 WAN Port

Physical Layer 10/100 Base-T (IEEE 802.3)

Data Rate 10/100 Mbps (Auto-Sensing)

Interface Auto MDI/MDIX

Mode Full or Half Duplex (Auto-Sensing)

Wi-Fi

Standards IEEE 802.11b/g/n, 2.4 GHz

Mode AP Mode (Device Configuration Only)

Others

Button 1 × Reset Button

Console Port 1 × USB 2.0 (Type-C) for Power Supply and Console

LED Indicators 1 × SYSTEM, 1 × LTE

Built-in Watchdog, Timer

Power Supply and Consumption

Power Input

1. 5V by Type-C Port
2. 5~12V DC by 3.5mm 2-pin Terminal Block

3. 802.3af standard PoE input by (Optional) PoE Splitter

Power Consumption	Typical 1.3W, Max 3.1 W
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Physical Characteristics

Ingress Protection	IP30
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Dimensions	Φ 115 x 21 mm (Φ 4.52 x 0.83 in) (Antenna Excluded)
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Color & Material	White, PC + ABS
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Installation	Desktop, Wall or Ceiling Mounting
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Environmental

Operating Temperature	-20°C to +50°C (-4°F to +122°F)
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Storage Temperature	-40°C to +85°C (-40°F to +185°F)
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Ethernet Isolation	1.5 kV RMS
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Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F
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Approvals

Regulatory	CE, FCC
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Environmental	RoHS
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