

NSG300 INDOOR LORAWAN GATEWAY

OPEN-SOURCE LORAWAN GATEWAY FOR ROBUST, SELF-SUFFICIENT IOT CONNECTIVITY

The NSG300 is an open-source LoRaWAN Gateway. It lets you bridge LoRa wireless network to an IP network via WiFi, Ethernet, or Cellular Network (via Optional 4G module). The LoRa wireless allows users to send data and reach extremely long ranges at low data rates. The NSG300 is fully compatible with the LoRaWAN protocol. It supports different kinds of LoRaWAN Network Connections such as Semtech UDP Packet Forwarder, LoRaWAN Basic Station, ChirpStack MQTT Bridge, and so on. This makes NSG300 work with most LoRaWAN platforms in the market.

NSG300 also includes a built-in LoRaWAN Server and IoT server, which provide the possibility for the system integrator to deploy the IoT service without cloud service or 3rd servers. NSG300 supports remote management. System Integrator can easily remotely monitor the gateway and maintain it.

- **Frequency Support:** Frequency Bands: EU868.
- **Cellular Option:** Optional 3G/4G cellular connection.
- **Flexible Login:** Support different level log in.
- **Open System:** Open Source OpenWrt system.
- **LoRaWAN Station:** Support LoRaWAN basic station.
- **Remote Access:** Remote access with Reverse-SSH or remote.it.
- **Packet Forwarding:** Support Semtech Packet Forwarder.
- **Robust Hardware:** Emulates 49x LoRa demodulators.
- **Easy Management:** Managed by Web GUI, SSH via WAN or WiFi.
- **Advanced Demodulation:** 10 programmable parallel demodulation paths.
- **Local Decoding:** Support Local decode ABP end node info and transfer to MQTT server.
- **Customizable Parameters:** Allow to customize LoRaWAN regional parameters.
- **Regional Settings:** Pre-configure to support different LoRaWAN regional settings.



KEY SPECIFICATIONS

Category	Feature	Specification
Hardware System	CPU	Quad-core Cortex-A7 1.2Ghz
	RAM	512MB
	eMMC	4GB
Interface	Port	10M/100M RJ45 PoE Port x 1
	WiFi	1 x 2.4G WiFi (802.11 bgn)
	Max Output Power	x1
	Sensitivity	x1
Operating Condition	Work Temperature	-20 ~ 70°C
	Storage Temperature	-20 ~ 70°C
	Power Input	5V, 2A, DC
Connectivity Options	WiFi	NSG300-WiFi
	4G	NSG300-4G

FEATURES AT A GLANCE



YOUR WIRELESS NETWORK

Develop a fully owned private LoRa network to capture, route and process IoT data for your application at multiple facilities.



RUGGED DURABILITY WITH A BROAD SENSOR ARRAY

Robust enclosures provide a resilient platform for recording and delivering data from within a range of harsh environments.



COMPREHENSIVE SECURITY AND RELIABILITY

Robust multi-layer security at each interface to safeguard your network at every level.



BROAD CERTIFICATION AND APPROVALS

CFR 21 (part 11), PPECB, FCC, IC, CE, ASNZS, NCC, and Bluetooth SIG listing.



THE PLATFORM FOR BUILDING ACTIONABLE IoT INTELLIGENCE

Route sensor data to the cloud with NviroSense's simplified wireless connectivity deployment.



PERSONAL SUPPORT FOR YOUR IMPLEMENTATION

Support works with NviroSense engineering to help configure and deploy your application.

APPLICATION AREAS



PHARMACEUTICAL WAREHOUSING



COLD CHAIN MANAGEMENT & FOOD SAFETY



IN-FIELD AGRICULTURAL MONITORING



INDUSTRIAL & MINING APPLICATIONS

NVIROSENSE SUPPORT



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NEW: The NviroSense NSS450 Series now offers a range of additional sensor options available via expansion port. For more details, visit the [EUCAstore](#)