

Single Channel LoRa Gateway

LG01N / OLG01N



Single Channel LoRa Gateway Indoor & Outdoor version

OVERVIEW:

LG01N & OLG01N are [open source single channel LoRa Gateway](#). It lets you bridge LoRa wireless network to an IP network via WiFi, Ethernet, 3G or 4G cellular. The LoRa wireless allows users to send data and reach extremely long ranges at low data-rates.

It provides ultra-long range spread spectrum communication and high interference immunity.

LG01N & OLG01N has [WiFi interface](#), [Ethernet port](#) and [USB host port](#). These Interfaces provide flexible methods for users to connect their sensor networks to Internet. LG01N & OLG01N can support the LoRaWAN protocol in single frequency and customized LoRa transmit protocol. LG01N and OLG01N is the [upgrade version of LG01-P & LG01-S & OLG01](#) LoRa Gateway, the new version can support more end nodes. The aim for LG01N / OLG01N is to provide a low cost IoT wireless solution to support upto 300 sensor nodes.

Specifications:

Linux Side:

- Processor: 400MHz, 24K MIPS
- Flash: 16MB ; RAM: 64MB

Interfaces:

- 10M/100M RJ45 Ports x 2
- WiFi: 802.11 b/g/n
- LoRa Wireless
- Power Input: 12V DC
- USB 2.0 host connector x 1
- USB 2.0 host internal interface x 1
- 3G/4G module (optional)

Order Option:

Indoor Version:

LG01-XXX-YY.

Outdoor Version:

OLG01-XXX-YY.

-XXX:

- 433: For Bands: EU433, CN470
- 868: For Bands: EU868, IN865
- 915: For US915, AU915, AS923, KR920

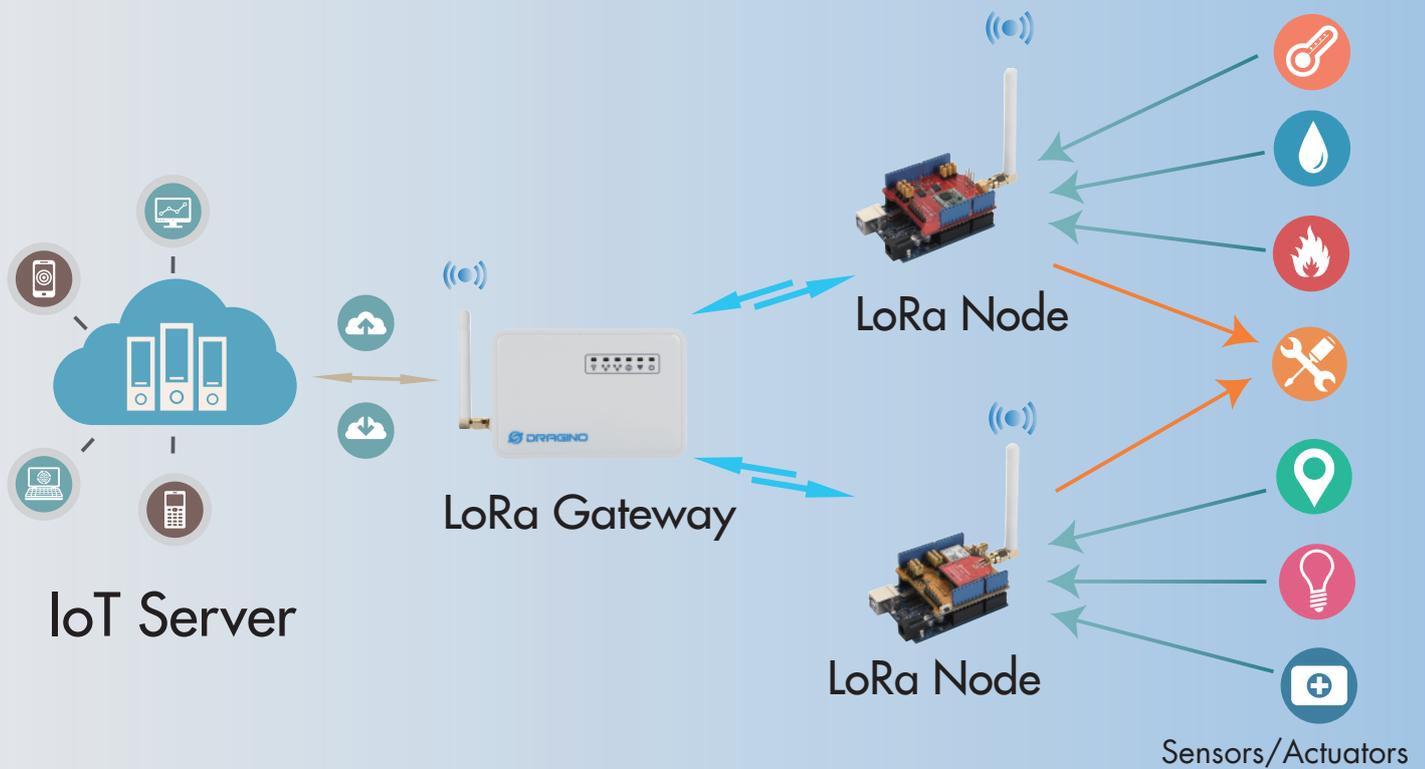
-YY:

- EC25-AU: Latin America, New Zeland, Taiwan
- EC25-E: EMEA, Korea, Thailand, India
- EC25-A: North America/ Rogers/AT&T/T-Mobile
- EC25-J: Japan, DOCOMO/SoftBank/ KDDI

Features:

- Open Source OpenWrt system
- Low power consumption
- Firmware upgrade via Web
- Software upgradable via network
- Flexible protocol to connect to IoT servers
- Auto-Provisioning
- Built-in web server
- Managed by Web GUI, SSH via LAN or WiFi
- Internet connection via LAN, WiFi, 3G or 4G
- Failsafe design provides robustly system
- 1 x SX1276/SX1278 LoRa modules
- Limited support in LoRaWAN/ Support Private LoRa protocol
- Support upto 300 nodes
- Max range in LoRa: 5~10 km. Density Area:>500m

LoRa Gateway Network Structure



Smart farm



Intelligent Community



Smart home



Outdoor monitoring



Smart medical



Intelligent plant



Cloud computation



Intelligent transport

Applications:

- Wireless Alarm and Security Systems
- Home and Building Automation
- Automated Meter Reading
- Industrial Monitoring and Control
- Long range Irrigation Systems
- GPS tracker, etc