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 Inter-faces provide flexible methods for users to connect their sensor networks to Internet. LG01N & OLG01N can support the LoRaWAN protocol in single frequency and custo-mized 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.

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

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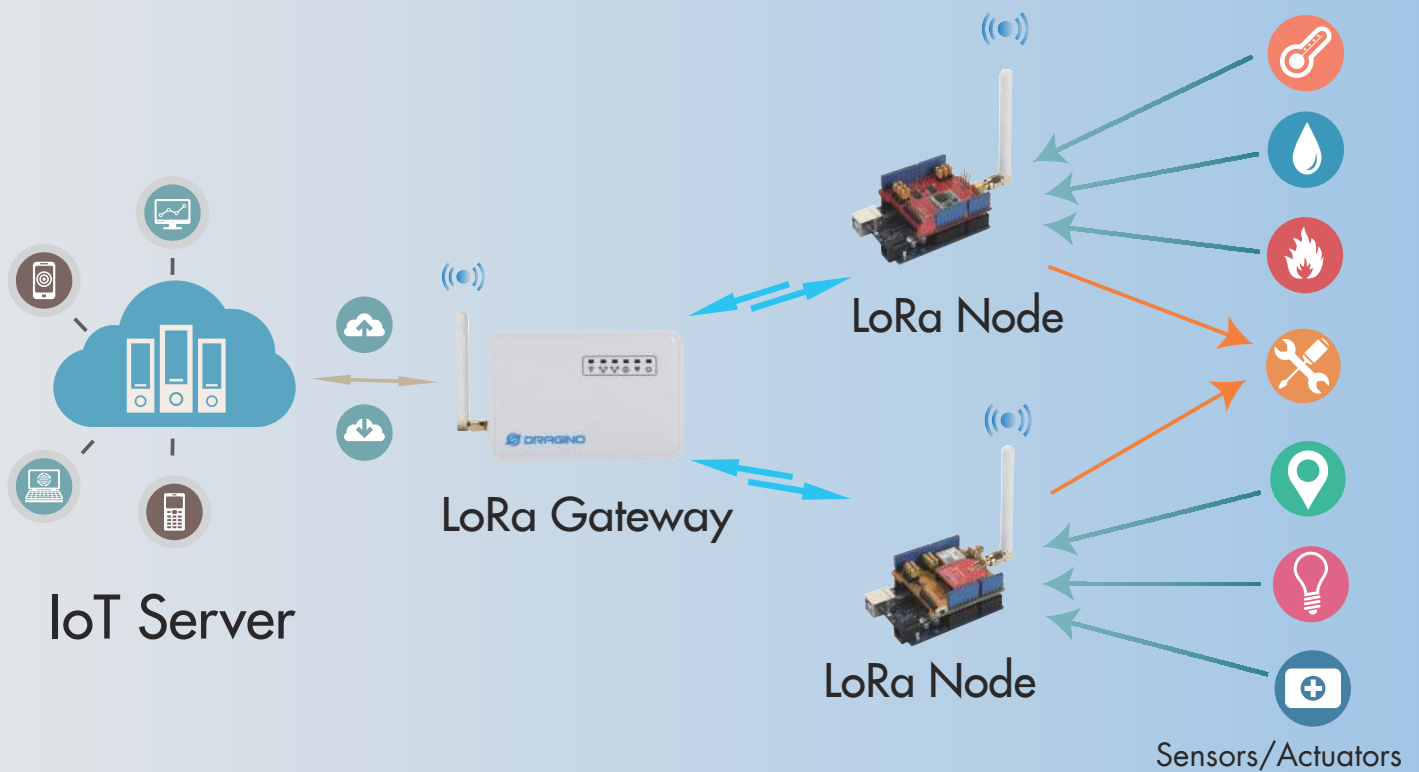**-YY**:
 EC25-AU: Latin America, New Zeland, Taiwan
 EC25-E: EMEA, Korea, Thailand, India
 EC25-A: North America/ Rogers/AT&T/T-Mobile
 EC25-J: Japan, DOCOMO/SoftBank/ KDDI

LoRa Gateway Network Structure

IoT Server

LoRa Gateway

LoRa Node

LoRa Node

Sensors/Actuators

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