

# Biz4Intellia Outdoor LoRaWAN Gateway INT-LoRaMult-02



Biz4Intellia LoRaWAN gateway is a robust 8-channel outdoor LoRaWAN® gateway. Adopting SX1302 LoRa chip and high-performance quad-core CPU, UG67 supports connection with more than 2000 nodes. This gateway has line of sight up to 15 km and IP67 waterproof case, which is ideally suited to smart agriculture, smart metering and many other outdoor applications.

Gateway supports not only multiple back-haul backups with Ethernet, Wi-Fi and cellular, but also has integrated mainstream network servers (such as TTI, ChirpStack, etc.) and built-in network server.

## Features

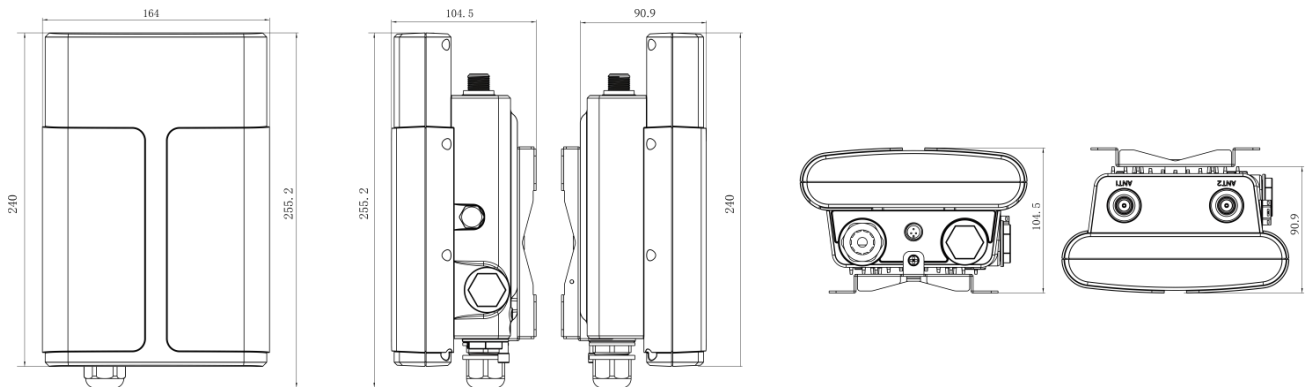
- Quad-core industrial processor with big memory
- Equip with SX1302 chip, handing a higher amount of traffic with lower consumption
- 8 half/full-duplex channels
- IP67 waterproof enclosure and industrial design for harsh environment applications
- Wall or pole mounting (optional)
- Capacitor for sending alarms in case of power failure
- Multi backhaul backups with Ethernet, cellular (4G/3G) and Wi-Fi
- Enable security communication with multiple VPNs like IPsec/OpenVPN/L2TP/PPTP/DMVPN
- Compatible with mainstream network servers like The Things Industries, ChirpStack, etc.
- Detect and analyze the noise level and provide intuitive diagram for deployment
- Built-in network server and MQTT/HTTP/HTTPS API for easily integration
- Embedded Python SDK for user's secondary development
- Fast and user-friendly programming by Node-RED development tool

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## Dimensions(mm)



## Specifications

### Hardware System

CPU	Quad-core 1.5 GHz, 64-bit ARM Cortex-A53
Memory	512 MB DDR4 RAM
Flash	8 GB eMMC

### LoRaWAN

Antenna	2 × Internal Antennas + 2 × 50 Ω N-Female External
Connectors Channel	8 (Half/Full-duplex)
Frequency Band	CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923-1&2&3&4
Sensitivity	-140 dBm 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

### Ethernet Interface

Port	1 × RJ45 (PoE PD supported)
Physical Layer	10/100/1000 Base-T (IEEE 802.3)
Data Rate	10/100/1000 Mbps (Auto-Sensing)
Interface	Auto MDI/MDIX
Mode	Full or Half Duplex (Auto-Sensing)

### Wi-Fi Interface

Antenna	Internal Antenna
Standards	IEEE 802.11 b/g/n, 2.4 GHz
Mode	AP or Client mode
Security	WPA/WPA2 authentication, WEP/TKIP/AES

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	encryption 802.11b: 18 dBm +/-2.0 dBm (11 Mbps)
	802.11g: 15 dBm +/-2.0 dBm (6 Mbps)
	802.11g: 15 dBm +/-2.0 dBm (54 Mbps)
Tx Power	802.11n@2.4 GHz: 14 dBm +/-2.0 dBm (MCS0_HT20)
	802.11n@2.4 GHz: 14 dBm +/-2.0 dBm (MCS7_HT20)
	802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS0_HT40)
	802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS7_HT40)

### Cellular Interface (Optional)

Antenna	Internal Antenna
SIM Slot	1 (mini SIM-2FF)

### GPS

Antenna	Internal Antenna
Sensitivity	-167dBm@Tracking, -149dBm@Acquisition, -161dBm@Re-
acquisition Position Accuracy	<2.5m CEP

### Others

Reset Button	1 × RST
Console Port	1 × Type-C
LED Indicators	1 × SYS, 1 × LoRa, 1 × LTE
Built-in	Watchdog, RTC, Timer

### Software

Network Protocols	PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, DDNS, HTTP, HTTPS, DNS, ARP, SNTP, Telnet, SSH, MQTT, etc.
VPN Tunnel	OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN
Firewall	ACL/DMZ/Port Mapping/MAC Binding/URL Filter
Management	Web, CLI, SMS, On-demand dial up, Workplace Platform
Reliability	WAN Failover
App	Python SDK, Node-RED

### Power Supply and Consumption

Power Input	1. 1 × 802.3 af PoE input 2. 12 VDC with M12 Connector
Power Consumption	Typical 3.6 W, Max 4.8 W

### Physical Characteristics

Ingress Protection	IP67
Dimensions	240 x 164 x 90.9 mm (9.45 x 6.46 x 3.58
in) Installation	Wall or Pole Mounting

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## Environmental

Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Storage Temperature	Reduced Cellular Performance Above 60°C
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (non-condensing) at 25°C/77°F

## Approvals

Regulatory	CE, FCC, RCM, TELEC, ANATEL
Environmental	RoHS

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