

Multi-Channel LoRaWAN® Gateway



MacLink Gen2 Overview

The **MacLink Gen2** is a robust, industrial-grade multi-channel LoRaWAN® gateway engineered for high-reliability IoT deployments. It supports LoRaWAN® Classes A/B/C and features integrated LTE (dual-SIM), Wi-Fi, Ethernet (PoE), GNSS, and a SuperCAP backup—making it ideal for remote monitoring, smart infrastructure, and critical deployments

Built for retrofitting industrial setups, it brings reliable wireless logging and monitoring to legacy and modern infrastructure alike.

Interfaces

Dual SIM 4G

WiFi

Ethernet (PoE)

Wireless Technology



Features

Wide Coverage Range

Up to 15+ km in rural and 2–5 km in urban areas.

High Concurrent Capacity

Supports thousands of LoRaWAN nodes simultaneously.

Carrier-Grade Reliability

IP67 enclosure for dustproof & waterproof

Multiple Backhaul Options

Ethernet, 4G/LTE, and Wi-Fi for flexible connectivity.

Supercap Backup

Provides protection against sudden power loss.

ARM Cortex-A7 Quad Core

Powerful processor for edge intelligence.

Seamless Integration

Compatible with private LNS , ChirpStack, Actility

Remote Management

OTA updates & cloud-based configuration

Low Power Consumption

Optimized design for energy-efficient operation

Compatible with all LoRaWAN® network servers & gateways

 Specifications

Processor

Type	ARM Cortex-A7
Number of cores	Quad core
Clock	960MHz per core
Memory size	512MB
Memory speed	1066MHz max
Internal memory	8GB eMMC
USB	Device for debug, on bottom of the enclosure
Connector	C-type
Protection	Surge protection

LoRaWAN®

Compatibility	LoRaWAN® , Class A/B/C
Frequency	IN865 / RU864 / EU868 / US915 / AU915 / KR920 / AS923-1/2/3/4
LoRa Demodulators	8 x 8 channels LoRa packet detectors
Demodulation paths	Up to 10 parallel
Uplinks channel	8
Downlink channel	1
TX power	Up to 27 dBm @ SF12, BW 125 kHz
RX sensitivity	Down to -139 dBm @ SF12, BW 125 kHz
Data-rate	Dynamic data-rate adaptation (ADR)

Antenna Connector	N-type female
Inbuilt LNS	ChirpStack server
Other functions	Node-RED with ChirpStack support

Backhual - Ethernet

Number	1
Type	1x 10/100M

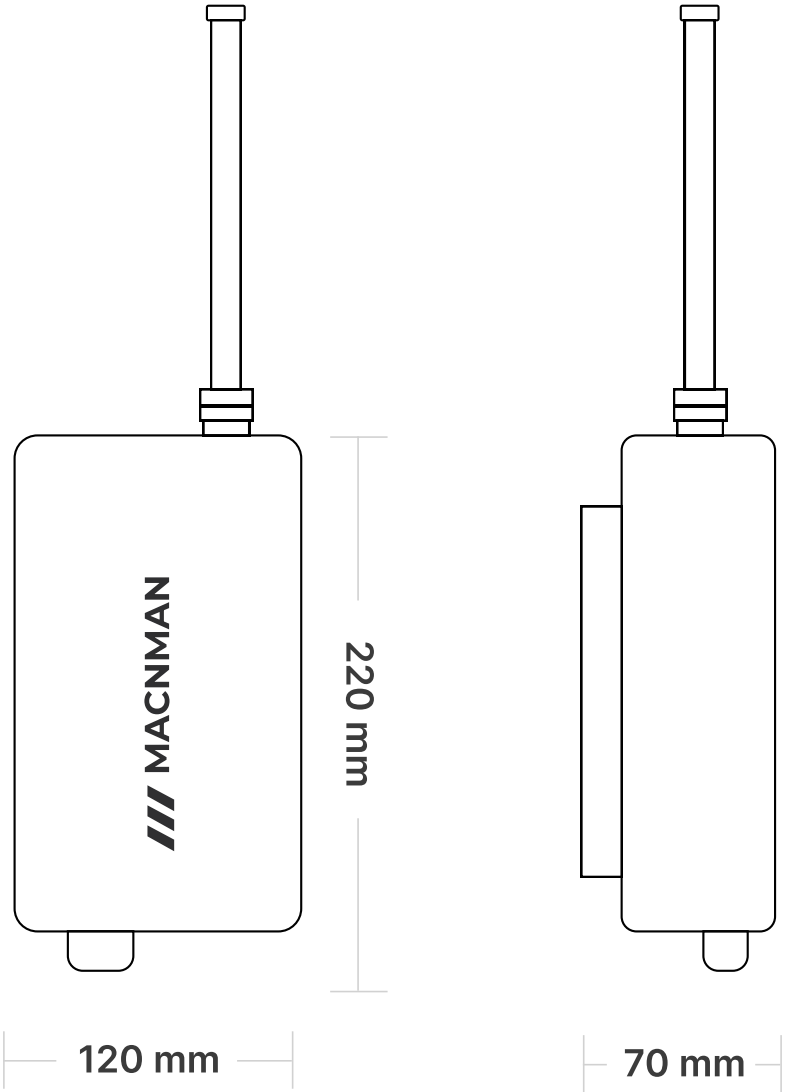
Backhual - WiFi

Bands	2.4 GHz ISM
Standards	802.11 b/g/n, 802.3, 802.3u , 802.11e-compatible bursting
Modulation schemes	BPSK, QPSK, 16 QAM, 64 QAM
Security	WEP, TKIP, and AES, WPA, WPA2
Antenna	Inbuilt inside the enclosure

Backhual - Cellular

Cellular bands	B1/3/5/7/8/20/28
Standards	802.11 b/g/n, 802.3, 802.3u , 802.11e-compatible bursting
Modulation schemes	BPSK, QPSK, 16 QAM, 64 QAM
Security	WEP, TKIP, and AES, WPA, WPA2
Antenna	Inbuilt inside the enclosure

 Device Dimensions



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