

# KONA Mobile IoT Gateway

## LoRaWAN® Gateway for Mobile Applications

The **KONA Mobile IoT Gateway** provides solution providers with a carrier grade product for the deployment of LoRaWAN® Internet of Things networks. The Gateway enables massive scalability in a compact form factor by supporting up to 12 million messages per day.

- **Smart Utilities**
- **Transport Trucks**
- **Shipping Containers**
- **Commercial Railway**
- **Railcar Monitoring**
- **Airplanes**



## Key Features

- » Time Division Duplex 64 Rx / 2 Tx
- » High Linearity LNA/Receiver
- » Optimized for Mobile Deployments
- » Precise Network Synchronization (GPS)
- » Integrated GPS Holdover
- » 1 Watt (30 dBm) Tx Power
- » Geolocalization Support
- » Hardened Carrier Grade Enclosure
- » Optional Cellular 3G/4G Modem
- » Copper and Optical Ethernet Backhaul
- » Rated IP67 Enclosure
- » NA 915, EU 868 MHz ISM Bands

## Key Product Differentiators

- » High availability carrier grade design with support of in-service configuration and software updates.
- » Environmentally hardened aluminium enclosure fully tested to withstand extreme temperature conditions.
- » Excellent isolation between the Tx and Rx bands as well as out of band rejection of Cellular and Paging networks.
- » Day-One scalability with support of up to 12 million received messages per day.
- » Easy to deploy supporting different backhaul and power options.
- » Leverages the HFC network in a LoRaWAN® solution.
- » Fully integrated with the broader eco-system of LoRa network servers and sensors.

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## LoRaWAN<sup>®</sup> Gateway for Mobile Applications

### Technical and Functional System Specifications

#### Mechanical Parameters

MTBF	450,000 hours
DC Power Consumption	< 40W
Operational Temperature	-40°C to +70°C
Operational Humidity	10% to 100% Condensing
Ingress Protection	IP67
Size	219 x 304 x 72 mm
Weight	5 kg
Volume	5.5 L

#### LoRa Radio Parameters

ISM Band	NA 915MHz, EU 868MHz
Tx Power	1W (30 dBm)
Rx Sensitivity	-142 dBm (SF12, 293 bits/sec)
Rx Noise Figure	3.5 dB
Rx Linearity	-10 dBm
Rx Dynamic Range	70 dB Analog, 100+ dB Digital
Tx to Rx Isolation	75 dB

#### Software and Management

Tools	Access Control List management
	3G/4G Parameter Configuration
	System Health Monitor
	Flight Recorder
	Radio Configuration and Control
	Remote Software Upgrade
	Active and Passive image management
	Factory image provisioning
Networking	DHCPv4 client
	TFTP server
	HTTP server
	Firewall and Access Lists

#### Interfaces

Ethernet Backhaul	RJ-45
GPS	N-Type
Cellular Backhaul (3G/4G)	USB (Optional)
LoRa Antenna	N-Type
Power	12 VDC

#### Regulatory Compliance

Safety	UL 60950-1 (US/C)
Environmental	ETSI EN 300 019-2-1, 300 019-2-2
	ETSI EN 300 019-2-3, 300 019-2-4
Regulatory	FCC Part 15.247, 109, 209