

KONA Macro IoT Gateway

Scalable LoRaWAN® Gateway for Outdoor Deployments

The **KONA Macro IoT Gateway** is an ideal solution for operators and enterprises that require a very scalable low cost LoRaWAN® gateway that minimizes network TCO while improving coverage and capacity.

- Smart Cities
- Smart Agriculture
- Asset Tracking
- Environmental Monitoring
- Smart Metering
- Waste Management
- Outdoor Industrial Facilities
- Multi-Building Campuses



Key Product Differentiators

- » Optimize coverage and capacity with a cost-effective and extremely compact LoRaWAN® gateway.
- » Quick and easy deployment made possible with custom mounting options, including utility pole, lamp post, tower, roof or wall mounts.
- » Reduce set-up costs with plug-and-play installation utilizing the custom provisioned factory image.
- » Lower site operational costs due to low power consumptions and passive cooling.
- » High availability carrier grade design with support for in-service configuration and software updates.
- » Excellent out of band rejection of Interference from other networks such as Cellular and Paging.
- » Fully integrated with the broad eco-system of LoRa™ network servers and sensors.

Key Features

- » US915, EU868, AU915, AS923 Channel Plans
- » Frequency Duplex 16 Rx / 2 Tx (NA)
- » Time Duplex 16 Rx / 2 Tx (Int.)
- » Integrated Cellular Modem
- » Integrated GPS and Cellular Antenna
- » IP67 Design
- » Hardened Carrier Grade Enclosure
- » 27 dBm Tx Power
- » Integrated Cavity Filter
- » Precise Network Synchronization (GPS)
- » Geolocation (optional)

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Technical and Functional System Specifications

Mechanical Parameters

MTBF	850,000 hours
DC Power Consumption	14 W (Typical)
Operational Temperature	-40°C to +60°C
Operational Humidity	10% to 100% Condensing
Ingress Protection	IP67
Size	144 x 282 x 92 mm
Weight	2.6 kg
Volume	3.7 L

LoRa Radio Parameters

Channel Plans (FDD)	US915
Channel Plans* (TDD)	EU868, AU915, AS923
Tx Power	27 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

*Supports all 800 & 900 LoRaWAN Channel Plans

Software and Management

Tools	Access Control List management
	Cellular Parameter Configuration
	System Health Monitor
	Radio Configuration and Control
	Remote Software Upgrade
	Active and Passive image management
	Factory image provisioning
	Field Configuration Tool
Networking	DHCPv4 client
	TFTP server
	HTTP server
	Firewall and Access Lists

Interfaces

Ethernet Backhaul	RJ-45
GPS	Internal antenna
Cellular Backhaul	Internal antenna
LoRa Antenna	N-Type
Power	37-57 VDC or PoE (802.3at)

Regulatory Compliance

Safety	UL / CSA / EN / IEC 62368-1
Regulatory	FCC: 15.247, 15.109, 15.209
	ISED: RSS - 247, RSS - Gen
	CE: RED 2014/53/EU



TEKTELIC Communications is a premier supplier of best-in-class LoRaWAN® IoT Gateways, Sensors, and custom applications. These elements combined provide a powerful end-to-end solution that can be easily, quickly, and cost effectively deployed to address the most demanding IoT challenges.

For more information please visit www.tektelic.com