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 LoRaWANTM gateway that minimizes network TCO while improving coverage and capacity. In order to facilitate rapid deployment, the gateway is designed to be extremely compact and light weight. With both the cellular modem and GPS antennas embedded internally the KONA Macro is targeted at network sites that dictate a small form factor and low power consumption. Rated IP67 it is designed for the most demanding outdoor installations. The KONA Macro can be installed in various locations reducing site and deployment costs while addressing different vertical IoT applications.



- Optimize coverage and capacity with a cost-effective and extremely compact LoRaWANTM 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

NA915, EU868, AU915, AS923 ISM Bands

Frequency Duplex 16 Rx / 2 Tx (NA)

Time Duplex 16 Rx / 2 Tx (Int.)

Integrated Bandpass Filter

Integrated GPS and 3G/4G Antenna

Precise Network Synchronization (GPS)

27 dBm Tx Power

Hardended Carrier Grade Enclosure

Backhaul Connectivity (ETH / 3G / 4G)

Geolocation (optional)

Versatile Mounting Options

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Technical and Functional System Specifications

Mechanical Parameters	
MTBF	850,000 hours
DC Power Consumption	< 12 W
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

Interfaces	
Ethernet Backhaul	RJ-45
GPS	(internal antenna)
Cellular Backhaul (3G/4G)	(internal antenna)
LoRa Antenna	N-Type
Power	-48VDC or PoE (802.3af)

Regulatory Compliance	
Safety	UL60950-1(US/C) IEC 60950-1 (CE)
Environmental	ETSI EN 300 019-2
Regulatory (EMC)	FCC Part 15.247, 109, 209
	ETSI EN 55022 Class B
	ETSI EN 55024
	ETSI EN 300 489-1/-3

LoRa Radio Parameters	
ISM Bands (FDD)	NA902-928, CN470-510
ISM Bands (TDD)	EU868, AU915, AS923, JP920, CH779
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

Software and Management	
Tools	Access Control List managment
	3G/4G 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
	Firewall and Access Lists









Specifications subject to change without notice.

TEKTELIC Communications is a premier supplier of best-in-class LoRaWAN™ loT 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 loT challenges.

