KONA Mega EU IoT Gateway

High Capacity LoRaWAN® Gateway for Global Deployments

TEKTELIC's **KONA Mega EU IoT Gateway** provides network operators with a field proven product for the deployment of LoRaWAN® networks in the global EU868 band. The KONA Mega Gateway offers superior RF performance with multiple Rx/Tx antennas which improve the end device SNR resulting in improved link budget and better battery performance. To mitigate real world RF interference the KONA Mega gateway comes with built-in custom High-Q RF Cavity filters that offer high levels of Rx Selectivity and Out-of-Band rejection.

It is ideal for public and private network operators that require cost effective and reliable gateways, with multiple Rx and Tx Channels, to maximise their network investment for years to come.

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.

» Innovative multiple antenna configuration supporting Rx diversity for 16 + 16 channels.

» Excellent out of band rejection of Interference from other networks such as Cellular and Paging.

» Day-One scalability supporting millions of Rx messages per day.

» Easy to deploy supporting different backhaul and power options

» Fully integrated with the broader eco-system of LoRa™ network servers and sensors.

Key Features

» Time Duplex 16 + 16 Rx / 2 + 2 Tx

» Dual Antenna Support for Rx Diversity

» Double Simultaneous Tx Channels

» High Linearity LNA/Receiver

» Integrated Bandpass Filter

» Precise Newtork Synchronization (GPS)

» Integrated GPS Holdover

» Up To 14 dBM Tx Power per Antenna

» Geolocalization Support

» Hardened Carrier Grade Enclosure

» Integrated Cellular 3G/4G Modem

» Copper and Optical Ethernet Backhaul

» Rated IP67 Enclosure

» EU 868 ISM Band

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Technical and Functional System Specifications

Mechanical Parameters

MTBF	450,000 hours
DC Power Consumption	< 30 W
Operational Temperature	-40°C to +60°C
Operational Humidity	10% to 100% Condensing
Ingress Protection	IP67
Size	222 x 265 x 101 mm
Weight	5 kg
Volume	6 L

LoRa Radio Parameters

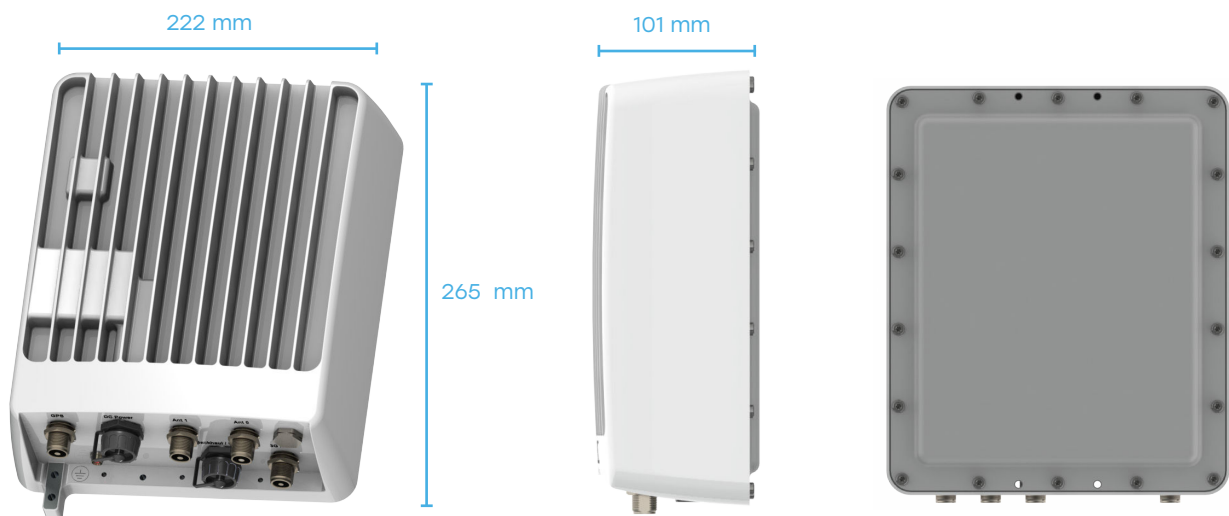|	
EU ISM Band	863 - 870 MHz
Tx Power	2 x 14 dBm
Rx Sensitivity	-142 dBm (SF12, 293 bits/sec)
Rx Noise Figure	3.5 dB
Rx Linearity	-10 dBm
Rx Dynamic Range	70 dB Analog, 100+ dB Digital

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

Interfaces

Ethernet Backhaul	
GPS	RJ-45 (Supports PoE++)
Cellular Backhaul (3G/4G)	N-Type
LoRa Antenna (2 ports)	N-Type (Optional)
Power	N-Type (2nd Port Optional)

-48VDC or POE++

Regulatory Compliance

Regulatory	2014/53/EU
Environmental	ETSI EN 300 019-2

222 mm

101 mm

265 mm