

# KONA Mega NA IoT Gateway

## High Capacity LoRaWAN® Gateway for Global Deployments

The **KONA Mega NA IoT Gateway** provides network operators 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.



 REGION WIDE NETWORK COVERAGE	 INDUSTRIAL OIL & GAS
 HIGH DENSITY NETWORKS	 COMMERCIAL FARMING
 SMART UTILITIES	 REMOTE MONITORING
 SMART CITIES	 REMOTE ASSET TRACKING



### Key Features

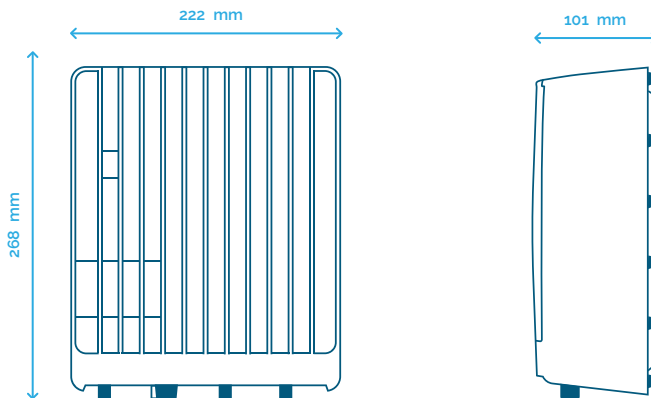
- US915 ISM Channel Plan
- Frequency Duplex 64+8 Rx / 4 Tx
- Dual Antenna Support for Rx Diversity
- Double Simultaneous Tx Channels
- Integrated Cellular Modem
- Copper Ethernet Backhaul
- IP67 Design
- Hardened Carrier Grade Enclosure
- 1 Watt (2 x 27 dBm) Tx Power
- High Linearity LNA/Receiver
- Integrated Cavity Filter
- Precise Network Synchronization (GPS)
- Integrated GPS Holdover
- Geolocation Support

### 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.
- Full duplex operation makes all receive and transmit channels available simultaneously
- Excellent isolation between the Tx and Rx bands, with strong out-of-band rejection of Cellular and adjacent-band interference.
- Day-One scalability with support of up to 12 million received 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.

**Technical and Functional System Specifications**

Mechanical Parameters		Software and Management		
MTBF	450,000 hours	Tools	Access Control List management	
DC Power Consumption	20 W (Typical)		Cellular Parameter Configuration	
Operational Temperature	-40°C to +60°C		System Health Monitor	
Operational Humidity	10% to 100% Condensing		Flight Recorder	
Ingress Protection	IP67		Radio Configuration and Control	
Size	222 x 268 x 101 mm		Remote Software Upgrade	
Weight	5 kg		Active and Passive Image Management	
Volume	6 L		Factory image provisioning	
<b>LoRa Radio Parameters</b>			Networking	Kona Link Tool
Channel Plans	902 - 915 MHz (Rx)			DHCPv4 client
	923 - 928 MHz (Tx)	TFTP server		
Tx Power	1W (2 x 27 dBm)	HTTP server		
Rx Sensitivity	-142 dBm (SF12, 293 bits/sec)	Firewall and Access Lists		
Rx Noise Figure	3.5 dB	<b>Interfaces</b>		
Rx Linearity	-10 dBm	Ethernet		RJ-45 & PoE (802.3bt)
Rx Dynamic Range	70 dB Analog, 100+ dB Digital	GPS		N-Type
Tx to Rx Isolation	75 dB	Cellular Backhaul	N-Type (Optional)	
<b>Regulatory Compliance</b>		LoRa Antenna (2 ports)	N-Type (2nd Port Optional)	
Regulatory	FCC: 15.247, 15.109, 15.209 ISED: RSS - 247, RSS - Gen	Power	37-57 VDC or PoE++ (802.3 bt)	
Safety	UL / CSA / EN / IEC 62368-1			



TEKTELIC Communications is a premier supplier of complete LoRaWAN® IoT solutions. Our end-to-end systems combine network infrastructure, devices, and applications to enable easy, fast, and cost-effective deployment for the most demanding IoT challenges.