

# **KONA Macro IoT Gateway**

# Scalable LoRaWAN<sup>®</sup> 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<sup>®</sup> 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



- >> 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**

- Frequency Duplex 16 Rx / 2 Tx (NA)
- Time Duplex 16 Rx / 2 Tx (Int.)
- >> Integrated Cellular 3G/4G Modem
- >> Integrated GPS and 3G/4G Antenna
- IP67 Design
- 27 dBm Tx Power
- Integrated Cavity Filter
- Precise Network Synchronization (GPS)
- >>> Geolocation (optional)

CE

# **KONA Macro IoT Gateway**

# Scalable LoRaWAN® Gateway for Outdoor Deployments

## **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	

### 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



### LoRa Radio Parameters

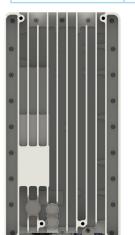
ISM Bands (FDD)	US915	
ISM Bands (TDD)	EU868, AU915, AS923	
Tx Power	27 dBm	
Rx Sensitivity	-142 dBm (SF12, 293 bits/sec)	
Rx Noise Figure	3.5 dB	
Rx Linearity	-10 dBm	
Rx Dynamic Range	70 dB Analog, 100+ dB Digital	
Interfaces		
Ethernet Backhaul	RJ-45	

Elhemel Backhaul	KJ-40	
GPS	Internal antenna	
Cellular Backhaul (3G/4G)	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	

Available SKU's (Digi-Key)				
T-Code	Region	Backhaul		
T0004937	North America	LTE + Ethernet		
T0005247	North America	Ethernet		
T0005130	Europe	LTE + Ethernet		
T0005249	Europe	Ethernet		





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