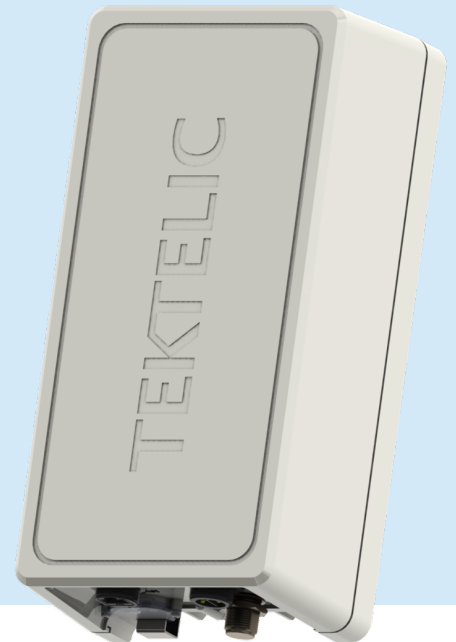# KONA Macro IoT Gateway

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

» 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

KONA Macro IoT Gateway

Scalable LoRaWAN® Gateway for Outdoor Deployments

Technical and Functional System Specifications

Mechanical Parameters

MTBF	850,000 hours
DC Power Consumption	< 20 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

LoRa Radio Parameters

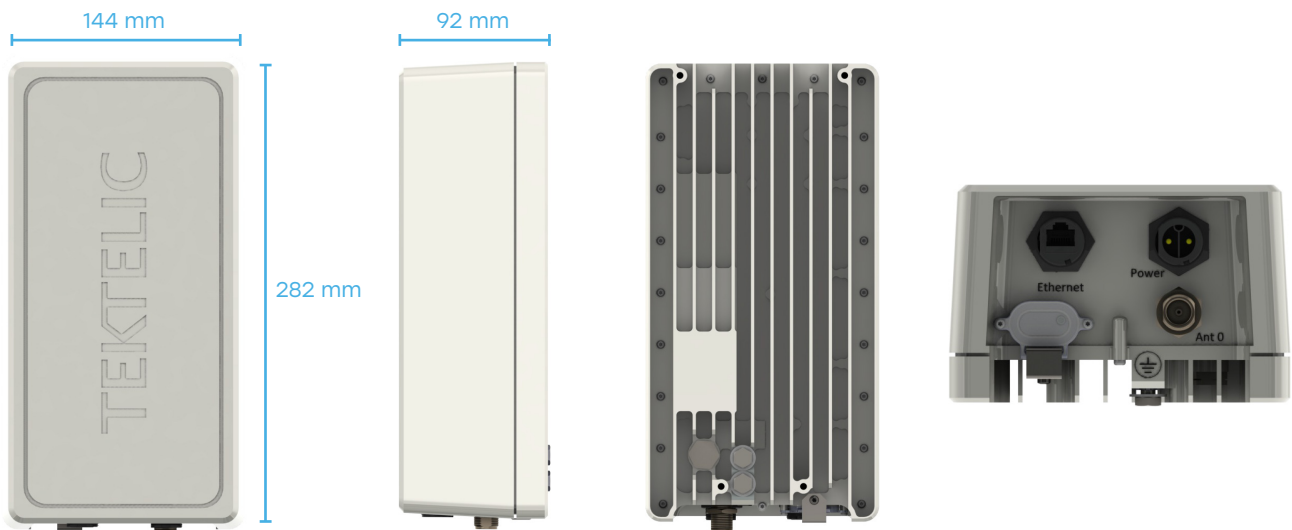|	
ISM Bands (FDD)	NA902-928, CN470-510
ISM Bands (TDD)	EU868, AU915, AS923, JP920, CH779
Tx Power	27 dBm
Rx Sensitivity	-142 dBm (SF12, 293 bits/sec)
Rx Noise Figure	3.5 dB
Rx Linearity	-10 dBm
Rx Dynamic Range	70 dB Analog, 100+ dB Digital

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

Interfaces

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

Regulatory Compliance

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

144 mm · 92 mm · 282 mm

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