

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

- » US915, EU868, AU915, AS923 Channel Plans
- » Frequency Duplex 16 Rx / 2 Tx (NA)
- » Time Duplex 16 Rx / 2 Tx (Int.)
- » Integrated Cellular Modem
- » Integrated GPS and Cellular Antenna
- » IP67 Design
- » Hardened Carrier Grade Enclosure
- » 27 dBm Tx Power
- » Integrated Cavity Filter
- » Precise Network Synchronization (GPS)
- » Geolocation (optional)

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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 |

LoRa Radio Parameters

| | |
|----------------------|-------------------------------|
| Channel Plans (FDD) | US915 |
| Channel Plans* (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 |

*Supports all 800 & 900 LoRaWAN Channel Plans

Software and Management

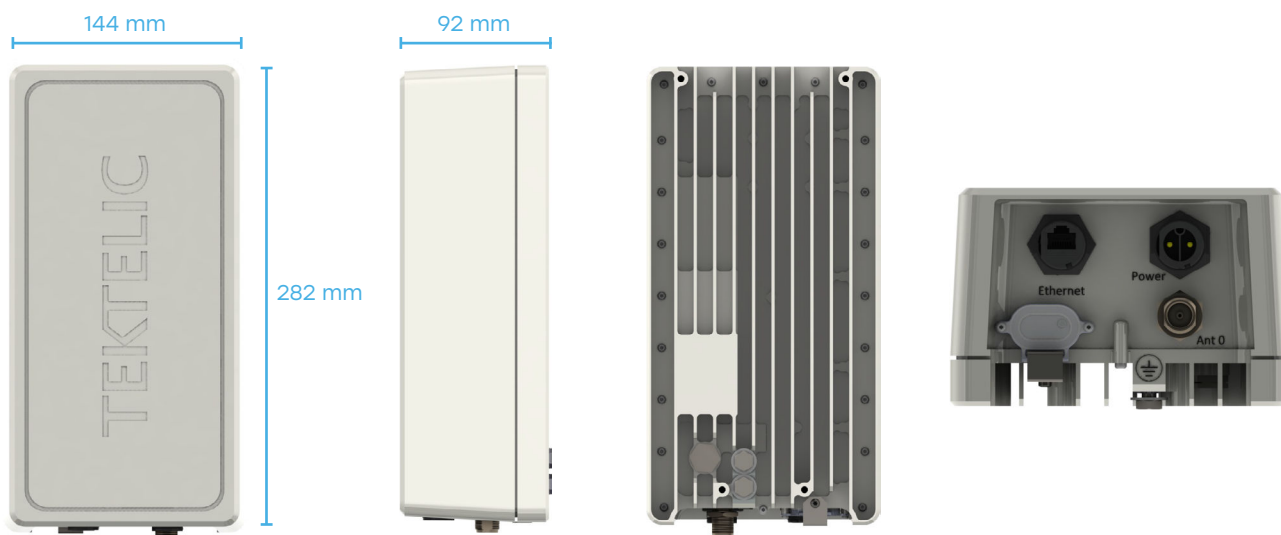
| | |
|------------|-------------------------------------|
| Tools | Access Control List management |
| | Cellular Parameter Configuration |
| | System Health Monitor |
| | Radio Configuration and Control |
| | Remote Software Upgrade |
| | Active and Passive image management |
| | Factory image provisioning |
| | Field Configuration Tool |
| Networking | DHCPv4 client |
| | TFTP server |
| | HTTP server |
| | Firewall and Access Lists |

Interfaces

| | |
|-------------------|----------------------------|
| Ethernet Backhaul | RJ-45 |
| GPS | Internal antenna |
| Cellular Backhaul | 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 |



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