

KONA Strand Macro IoT Gateway

High Capacity LoRaWAN® DOCSIS Gateway for IoT Deployments

TEKTELIC's KONA Strand Macro IoT Gateway provides network operators with a carrier grade product designed for the rapid deployment of LoRaWAN® Internet of Things networks. The Gateway accomodates diverse deployment requirements in a single box solution.

- Cable Strand Deployment
- Smart Utilities Management
- High Density Networks
- Smart Cities



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 making all receive and transmit channels available simultaneously.
- Excellent isolation between the Tx and Rx bands as well as out of band rejection of Cellular and Paging networks.
- Day-One scalability with support of up to 12 million received messages per day.
- >>> Leverages the HFC network in a LoRaWAN® solution.
- >>> Fully integrated with the broader eco-system of LoRa network servers and sensors.

Key Features

- Frequency Duplex 32 Rx / 1 Tx
- High Linearity
- Integrated Bandpass Filter (Duplexer)
- Precise Newtork Synchronization (GPS)
- Integrated GPS Holdover
- >> 27 dBm Tx Power
- Geolocalization Support
- Hardened Carrier Grade Enclosure
- >>> DOCSIS 3.0 Cable backhaul
- Lightning Arrester Equipped
- Rated IP67 Enclosure
- NA 915 ISM Band





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Technical and Functional System Specifications

Mechanical Parameters

MTBF	450,000 hours
DC Power Consumption	< 50W
Operational Temperature	-40°C to +60°C
Operational Humidity	5% to 100% Condensing
Ingress Protection	IP67
Size	268.9 x 179.9 x 130.7 mm
Weight	2.81 kg
Volume	6.3 L

LoRa Radio Parameters

ISM NA Band	902 - 915 MHz (Rx)
	923 - 928 MHz (Tx)
Tx Power	27dBm
Rx Sensitivity	-135 dBm (SF10)
Rx Noise Figure	3.5 dB
Rx Linearity	-10 dBm
Rx Dynamic Range	70 dB Analog, 100+ dB Digital
Tx to Rx Isolation	75 dB

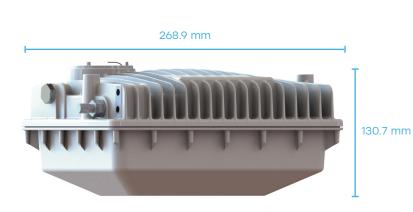
Software and Management

System Health Monitor
Flight Recorder
Radio Configuration and Control
Remote Software Upgrade
Active and Passive image management
DHCPv4 client
TFTP server
HTTP server

Interfaces

Backhaul	DOCSIS 3.0
GPS	Internal
LoRa Antenna	Internal
Power	HFC (44 - 90 Vac)

Safety	CSA/UL/ 62368-1
Surge	EN 61000-4-5 (+/-6 kV)
Regulatory	FCC Part 15.247, 109, 209



179.9 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.