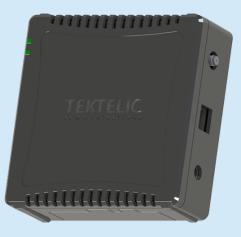# KONA Micro Lite IoT Gateway
Miniature LoRaWAN® Gateway for Home and Small Office

The KONA Micro Lite IoT gateway allows users to experience premier IoT connectivity with improved coverage, consistent service and reliability, regardless of their proximity to the LoRaWAN™ network. This plug-and-play gateway connects directly into an existing broadband service, self-configures and extends LoRA™ coverage inside the home or small office.

- Smart Home & Office
- Facility Management
- Smart Buildings
- Schools & Universities
- Retail
- LoRaWAN Validation

Key Product Differentiators

» Reduce operation and deployment costs by utilizing KONA Micro Lite IoT Gateway with existing IP backhaul.

» Improve coverage and services resulting in increased adoption and customer satisfaction.

» Maximize benefit to customer by enabling a wide range of additional IoT services such as home and asset monitoring, security, health and fitness.

» Robust gateway design manufactured for quality.

» Self-optimizing plug-n-play installation.

» Integrated with eco-system of network servers and devices.

Key Features

» Most Global ISM Bands

» Time Duplex 8 Rx / 1 Tx

» Integrated Filter

» External LoRa Antenna

» 27 dBm Tx Power

» Plug-n-Play Operation

» Factory Image For Mass Deployments

» In-Service Updates

KONA Micro Lite IoT Gateway

Miniature LoRaWAN® Gateway for Home and Small Office

Technical and Functional System Specifications

Interfaces

Ethernet	Modular RJ45
	10/100 BaseT with autonegotiation
WiFi (optional)	2.4GHz (802.11 b/g)
	WPA2 Security
	Integrated Antenna
Power	Off-the-shelf 5V/2A wall adapter
	5.5 mm barrel connector

Hardware

CPU	NXP Kinetis K64MCU-120MHz Cortex M4
	Integrated 1Mb Flash and 256Kb SRAM
	Pre-programmed MCU for higher volume
Memory	SPI NOR Flash - up to 2 MB
Packaging	Polycarbonate Enclosure
Dimensions	96 x 96 x 25 mm
Cooling	Convection Cooled
LED-1	Power Indicator
LED-2	LoRa Link Indicator
LED-3	WiFi Link / Traffic Indicator

Software

OS	FreeRTOS
Configuration and Calibration	NVM storage management
Gateway Image Management	Factory image provisioning
	Active and Passive image management
	Firmware update over ETH/WiFi
	Image corruption recovery built in
Networking	DHCPv4 client
	TFTP server
	HTTP server
	Firewall and Access Lists

LoRa Parameters

ISM NA915 Band	902 - 928 MHz
ISM EU868 Band	863 - 870 MHz
ISM AU915 Band	915 - 928 MHz
ISM AS923 Band	920 - 928 MHz
Tx Power	Adjustable to 27 dBm
Rx Sensitivity	-141 dBm (SF12, 293 bits/sec)
Rx Noise Figure	3.0 dB
Rx Linearity	-10 dBm
Rx Dynamic Range	60 dB

Regulatory Compliance

Safety	UL 60950-1
EMC	FCC Part 15: 247, 109, 209, 107
	FCC Colocation (WiFi version only)
	ETSI 300 489-1, 489-3, 489-17 (EU only)
	ETSI 300 220-1, 220-2 (EU only)
	ETSI 300.328 (WiFi version only)
Environmental	Operating Temperature: 0°C to +40°C
	Storage Temperature: -20°C to +70°C
	Humidity: 5% to 95% Non-Condensing

Management

Tools	Access Control List managment
	WiFi Parameter Configuration
	Firmware update and reset

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