

KONA Mega Ex Gateway - NA

Scalable Class I, Class II Div 2 and Zone 2 and 22 Rated LoRaWAN® Gateway for Outdoor Hazardous Location Deployments

TEKTELIC's **KONA Mega Ex IoT Gateway** is rated Type 6 (IP67) and is certified for Class I, Class II Div 2 and Zone 2 Hazardous areas. The gateway is designed for Hazardous area installations where combustible gasses, vapors or liquids may be present. It is ideal for public and private network operators that require Full Duplex, multiple Rx and Tx Channels, rugged industrial design and reliable LoRaWAN® gateways to maximize their network investment.



 CLASS I, CLASS II DIV 2 AND ZONE 2 AND 22 DEPLOYMENTS	 PIPELINE MONITORING	 MINING
 CHEMICAL PRODUCTION FACILITIES	 COMMERCIAL GRAIN PRODUCTION	 REFINERIES & PROCESSING PLANTS

Key Features

- Frequency Duplex 64 + 8 Rx / 4 Tx
- Class I, Class II Division 2 and Zone 2 Certified
- Double Simultaneous Tx Channels
- High Linearity LNA/Receiver
- Integrated Bandpass Filter
- Precise Network Synchronization (GPS)
- Integrated GPS Holdover
- 1 Watt (2 x 27 dBm) Tx Power
- Geolocation Support
- Hardened Carrier Grade Enclosure
- Integrated Cellular Modem
- Ethernet Backhaul
- Type 6 (IP67) Enclosure
- US 915 Channel Plan

Key Product Differentiators

- High availability carrier grade design with support of in-service configuration and software updates
- Certified for ATEX Class I, Class II Division 2 and Zone 2 Hazardous Area.
- 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.
- Easy to deploy supporting different backhaul and power options.
- Fully integrated with the broader eco-system of LoRa® network servers and sensors.

Technical and Functional System Specifications

Mechanical Parameters			Software and Management	
MTBF	450,000 hours		Tools	Access Control List management
DC Power Consumption	< 40 W			Cellular Parameter Configuration
Operational Temperature	-40°C to +60°C			System Health Monitor
Operational Humidity	10% to 100% Condensing			Flight Recorder
Ingress Protection	Type 6 (IP67)			Radio Configuration and Control
Size	222.2 x 267.6 x 101 mm			Remote Software Upgrade
Weight	5 kg			Active and Passive Image Management
Volume	6 L			Factory image provisioning
LoRa Radio Parameters			Networking	DHCPv4 client
Channel Plans	902 - 915 MHz (Rx) 923 - 928 MHz (Tx)			TFTP server
Tx Power	1W (2 x 27 dBm)			HTTP server
Rx Sensitivity	-142 dBm (SF12, 293 bits/sec)			Firewall and Access Lists
Rx Noise Figure	3.5 dB		Interfaces	
Rx Linearity	-10 dBm		Ethernet Backhaul	M12
Rx Dynamic Range	70 dB Analog, 100+ dB Digital		GPS	N-Type
Tx to Rx Isolation	75 dB		Cellular Backhaul	N-Type
Regulatory Compliance			LoRa Antenna	N-Type
Safety	Canada/USA Division Marking Class I Div 2 Group A B C D T5 Class II Div 2 Group F G T5	CSA C22.2 No. 213 UL 121201	Power	48VDC or PoE++
	Canada/USA Zone Marking Class I Zone 2 AEx ec IIC T5 Gc Zone 22 AEx tc IIC IIIC T100°C Dc	CSA C22.2 No. 60079 0, UL 60079 0 CSA C22.2 No. 60079 7, UL 60079 7 CSA C22.2 No. 60079 11, UL 60079 11 CSA C22.2 No. 31, UL 60079 31		
ATEX Marking II 3 G Ex ec IIC T5 Gc II 3 D Ex tc IIC IIIC T100°C Dc		EN 60079-0 EN 60079-7 EN 60079-11 EN 60079-31		
Temperature Marking	-40°C to +60°C			
Environmental	ETSI EN 300 019-2			
Regulatory	FCC Part 15, 247, 109, 209			

222.2 mm

267.6 mm

101 mm

TEKTELIC Communications is a premier supplier of complete LoRaWAN® IoT solutions. Our end-to-end systems combine network infrastructure, devices, and applications to enable easy, fast, and cost-effective deployment for the most demanding IoT challenges.