

KONA Mega Ex Gateway

Scalable Zone 2/ATEX rated LoRaWAN® Gateway for Explosive Atmosphere Deployments

TEKTELIC's **KONA Mega Ex IoT Gateway** is rated IP67 and ATEX and IECEx Zone 2 and 22 certified. The gateway is designed for Explosive Atmosphere installations where combustible gasses, vapors or liquids may be present. It is ideal for public and private network operators that require, rugged industrial design and reliable LoRaWAN® gateways to maximize their network investment.



 <p>ATEX AND IECEX ZONE 2 AND 22 DEPLOYMENTS</p>	 <p>PIPELINE MONITORING</p>	 <p>MINING</p>
 <p>CHEMICAL PRODUCTION FACILITIES</p>	 <p>COMMERCIAL GRAIN PRODUCTION</p>	 <p>REFINERIES & PROCESSING PLANTS</p>

Key Features

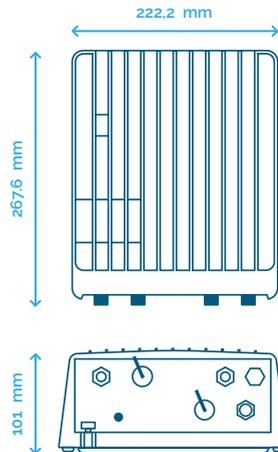
- Time Duplex 32 + 4 Rx / 4 Tx
- ATEX and IECEx Zone 2 and 22
- Double Simultaneous Tx Channels
- High Linearity LNA/Receiver
- Integrated Bandpass Filter
- Precise Network Synchronization (GPS)
- Integrated GPS Holdover
- Up To 14 dBm Tx Power per Antenna
- Geolocation Support
- Hardened Carrier Grade Enclosure
- Integrated Cellular Modem
- Ethernet Backhaul
- IP67 Enclosure
- EU 868 Channel Plan

Key Product Differentiators

- High availability carrier grade design with support of in-service configuration and software updates
- Certified for ATEX and IECEx Zone 2 and 22 Classified Deployments
- Innovative multiple antenna configuration supporting Rx diversity for 32 channels.
- 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	20 W (Typical)		Cellular Parameter Configuration
Operational Temperature	-40°C to +60°C		System Health Monitor
Operational Humidity	10% to 100% Condensing		Flight Recorder
Ingress Protection	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	863 - 870 MHz		TFTP server
Tx Power	2 x 14 dBm		HTTP server
Rx Sensitivity	-142 dBm (SF12, 293 bits/sec)		Firewall and Access Lists
Rx Noise Figure	3.5 dB		
Rx Linearity	-10 dBm		
Rx Dynamic Range	70 dB Analog, 100+ dB Digital	Interfaces	
Tx to Rx Isolation	75 dB	Ethernet Backhaul	M12
Regulatory Compliance		GPS	N-Type
Safety	IECEX Marking Ex ec (ic) IIC T5 Gc Ex tc (ic) IIC T100°C Dc	Cellular Backhaul	N-Type
	IEC 60079-0 IEC 60079-7 IEC 60079-11 IEC 60079-31	LoRa Antenna	N-Type
ATEX Marking Ⓜ II 3 G Ex ec (ic) IIC T5 Gc Ⓜ II 3 D Ex tc (ic) IIC T100°C Dc	EN 60079-0 EN 60079-7 EN 60079-11 EN 60079-31	Power	48VDC or PoE++
Temperature Marking	-40°C to +60°C		
Environmental	ETSI EN 300 019-2		
Regulatory	ETSI EN 55022 Class B		
	ETSI EN 55024		
	ETSI EN 300 489-1/-3		



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.