

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.



 ATEX AND IECEx ZONE 2 AND 22 DEPLOYMENTS	 PIPELINE MONITORING	 MINING
 CHEMICAL PRODUCTION FACILITIES	 COMMERCIAL GRAIN PRODUCTION	 REFINERIES & PROCESSING PLANTS

Key Features

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

Key Product Differentiators

- High availability carrier grade design with support of in-service configuration and software updates
- Day-One scalability with support of up to 12 million received messages per day.
- Certified for ATEX and IECEx Zone 2 and 22 Classified Deployments
- Easy to deploy supporting different backhaul and power options.
- Innovative multiple antenna configuration supporting Rx diversity for 32 channels.
- Fully integrated with the broader eco-system of LoRa® network servers and sensors.
- Excellent isolation between the Tx and Rx bands as well as out of band rejection of Cellular and Paging networks.

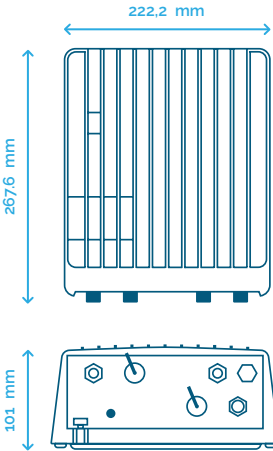
Technical and Functional System Specifications

Mechanical Parameters		
MTBF	450,000 hours	
DC Power Consumption	20 W (Typical)	
Operational Temperature	-40°C to +60°C	
Operational Humidity	10% to 100% Condensing	
Ingress Protection	IP67	
Size	222.2 x 267.6 x 101 mm	
Weight	5 kg	
Volume	6 L	
LoRa Radio Parameters		
Channel Plans	863 - 870 MHz	
Tx Power	2 x 14 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	
Tx to Rx Isolation	75 dB	
Regulatory Compliance		
Safety	IECEx Marking Ex ec [ic] IIC T5 Gc Ex tc [ic] IIIC T100°C Dc	IEC 60079-0 IEC 60079-7 IEC 60079-11 IEC 60079-31
ATEX Marking Ⓔ II 3 G Ex ec [ic] IIC T5 Gc Ⓔ II 3 D Ex tc [ic] 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	ETSI EN 55022 Class B ETSI EN 55024 ETSI EN 300 489-1/-3	

Software and Management		
Tools	Access Control List management	
	Cellular Parameter Configuration	
	System Health Monitor	
	Flight Recorder	
	Radio Configuration and Control	
	Remote Software Upgrade	
	Active and Passive Image Management	
Networking	Factory image provisioning	
	DHCPv4 client	
	TFTP server	
	HTTP server	
Interfaces	Firewall and Access Lists	
	Ethernet Backhaul	M12
	GPS	N-Type
	Cellular Backhaul	N-Type
LoRa Antenna	N-Type	
Power	48VDC or PoE++	

222.2 mm

267.6 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.