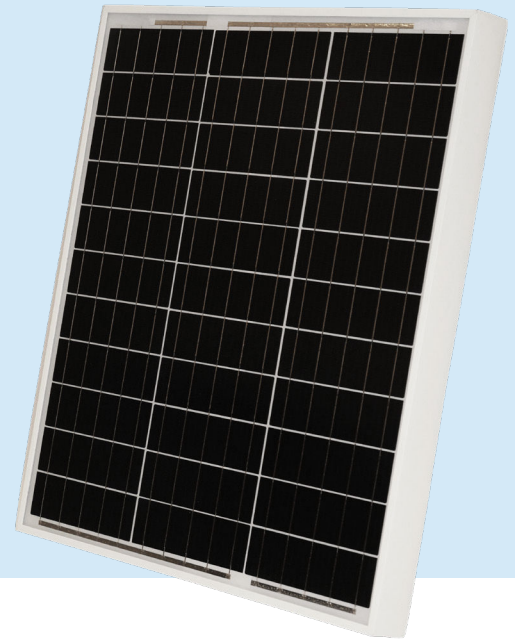


KONA Photon Gateway

Solar LoRaWAN Gateway for Autonomous Remote Deployments

The KONA Photon LoRaWAN® Gateway is a Zero Footprint single module solution. The solar panel charges the built-in batteries to provide enough power for all practical deployments across the globe and all environmental conditions. It comes with 3G/4G modem and GPS built in, and support for external LoRa and Cellular antennas for better coverage. Like all TEKTELIC Carrier Grade Gateways, the KONA Photon Gateway features high availability and dependability to ensure operator lowest Total Cost of Ownership.

- Oil & Gas
- Mining
- Forestry
- Agricultural
- Rural
- Farming
- Fisheries
- Remote industrial



Key Software Features

- » Radio Remote Configuration, Monitoring and Control
- » Cellular Backhaul Configuration
- » Remote Software Upgrades
- » Active and Standby Image Management
- » KONA Link Web-based Configuration
- » Firewall and Access Lists
- » Integration with Third-Party Network Servers

Key Hardware Features

- » Time Division Duplex with 8 Rx & 1 Tx
- » 3G/4G Cellular Backhaul
- » IP67 Design
- » -30° to +65° C Operating Temperature*
- » Pole, Wall, Tower/Building Mounting Options
- » GPS with Internal Antenna
- » External LoRa Antenna
- » Internal Cellular antennas with option for External
- » 50 Hour Internal Battery
- » Integrated Surge Protection

*Continuous system availability is dependant on solar irradiance levels and ambient temperature. Contact TEKTELIC for an availability estimate for your geographic area

KONA Photon Gateway

Solar LoRaWAN Gateway for Autonomous Remote Deployments

Technical and Functional System Specifications

Mechanical Parameters

Operational Temperature	-30°C to +65°C
Operational Humidity	10% to 100% Condensing
Ingress Protection	IP67
Weight	100W: 19 kg, 50W: 16 kg
Size	100W: 970 x 540 x 90 mm 50W: 550 x 540 x 90 mm (Excluding Mount)

LoRa Radio Parameters

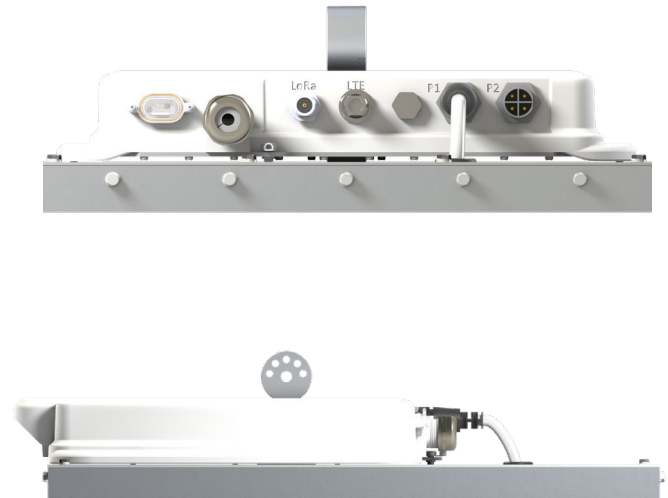
ISM Bands	All Global Bands
Tx Power	14 dBm to 27 dBm
Rx Sensitivity	-139.5 dBm (SF12, 293 bits/sec)
Rx Noise Figure	2.5 dB
Rx Linearity	-5 dBm
Rx Dynamic Range	70 dB Analog, 100+ dB Digital

Interfaces

Cellular Backhaul (3G/4G)	Switched N-Type with Integrated 10kA Surge Protection
LoRa Antenna	N-Type with Integrated 10kA Surge Protection
Power	Solar with Internal Battery

Regulatory Compliance

Safety	IEC 62368-1 (CE)
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 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