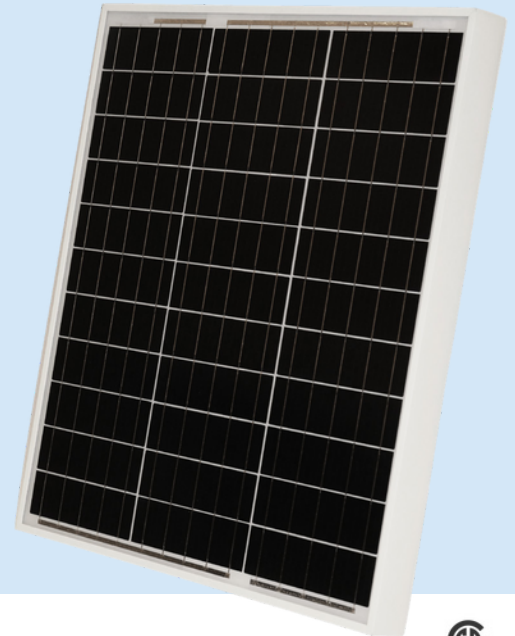


# KONA Photon IoT Gateway

## 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.

- **Urban/Suburban**
- **Smart Cities**
- **Smart Agriculture**
- **Oil & Gas**
- **Industrial**
- **Asset Tracking**



### Key Software Features

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

### Key Hardware Features

- » US915, EU868, AU915, AS923 ISM Bands
- » Time Division Duplex 8 Rx & 1 Tx
- » Integrated Cellular 3G / 4G Modem
- » Built-in GPS with Internal Antenna
- » Internal Cellular Antennas with option for External
- » External LoRa Antenna
- » IP67 Design
- » 50 Hour Internal Battery
- » 5000 Charge Cycles
- » -30 to +65°C Ambient Operating Temperature\*
- » Pole, Wall, Tower/Building Mounting Options
- » Built to withstand 150km/h winds
- » Integrated Surge and Lightning 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 IoT Gateway

## Solar LoRaWAN Gateway for Autonomous Remote Deployments

### Technical and Functional System Specifications

#### Mechanical Parameters

Operating Temperature	-30 to +50°C Charge -40 to +60°C Discharge
Operational Humidity	10% to 100% Condensing
Ingress Protection	IP67
Weight	95W: 19 kg, 50W: 16 kg
Size	95W: 970 x 540 x 90 mm 50W: 550 x 540 x 90 mm (Excluding Mount)

#### 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

#### 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

#### Regulatory Compliance

Safety	UL / CSA / EN / IEC 62368-1
Regulatory	FCC: 15.247, 15.109, 15.209
	ISED: RSS - 247, RSS - Gen
	CE: RED 2014/53/EU

