

LoRaWAN Gateway

This connected communications hub offers full LoRaWAN® Stack support, built-in Ethernet connectivity, WiFi functionality and optional LTE.

Connect your existing fleet with AoFrio's range of IoT solutions (including the AoFrio LoRaWAN temperature sensor) for always-on, secure and reliable data upload from your Food Retail equipment to the AoFrio iQ Platform for remote monitoring and food safety compliance.



- A secure communications hub that enables timely temperature alerts and fleetwide, remote food safety monitoring.
- Reliable Cloud connection through full LoRaWAN Stack support (V 1.0.3) with Semtech SX1302. Also supports 2.4 GHz Wi-Fi AP for configuration
- Future proofs assets with the latest connection technology including 100M Base-T Ethernet with PoE, multi back-haul with Ethernet, Wi-Fi, and Cellular
- Built-in Network Server for easy applications deployment and integration with LTE Cat 4 network (optional)

Hardware specifications	
Power Supply	DC 12 V - 1 A PoE (IEEE 802.3 af), 36~57 VDC
Computing	MT7628, DDR2 RAM 128 MB
Nano SIM	12.30 x 8.80 x 0.67 mm Supports Quectel EG95-E / EG95-NA / EC25-J / EC25-AU / EC25-E (IoT / M2M -optimized LTE Cat 4 Module)*
LED indicators	7 LEDs for Power, Breathing, ETH, LoRa, WLAN, LTE
Antenna	Depending on the frequency range, either: <ul style="list-style-type: none"> • Frequency Range 863~870 MHz - RAKARJ15 868 MHz White Blade LoRa Antenna • Frequency Range 902~928 MHz - RAKARJ14 915 MHz White Blade LoRa Antenna
Ingress protection	IP30
Operating Temperature	- 10 °C to + 55 °C
Storage Temperature	- 40 °C to + 85 °C
Operating Humidity	0~95 % RH non-condensing
Storage Humidity	0~95 % RH non-condensing
Mounting	Desktop, Wall (via included bracket) or Rail (via included bracket)
Weight	0.3kg (0.66lb)
Dimensions	166 x 127.5 x 36 mm (6.5 x 5 x 1.41 in)
Approvals	

* Regional variations apply

Wi-Fi

Frequency	2.4 GHz (802.11b /g / n)
RX Sensitivity	- 95 dBm (Min)
TX Power	20 dBm (Max)
Operation channels	2.4 GHz, 1-13, SX1302 Mini PCIe card, 8 Channels

LoRa

RX Sensitivity	- 139 dBm (Min)
TX Power	27 dBm (Max)
Frequency	EU868 / IN865 / RU864 / US915 / AU915 / KR920 /AS923-1-2-3-4 / EU433 / CN470

Software

LoRaWAN	Network	Management
Gateway OTA Management	-	WisDM
LoRa package forward	Uplink backup	SSH2
Country code setup	802.1q	Firmware update
TX Power setup	DHCP Server/Client	NTP
Data logger	Router Module NAT	Configure the LoRa Packet Forwarder
Statistics	Firewall	Built-in Server
Location setup	LTE APN Setup	OpenVPN, Ping Watch Dog
Server address & Port setup	-	MQTT Bridge
Supports class A, C	Wi-Fi AP mode	WEB Management

Hardware interfaces

The hardware interfaces of AoFrio LoRaWAN Gateway include DC 12 V, ETH interface, Type-C USB console interface, Reset key, SD Card slot, NanoSIM Card slot, Status indicator LEDs, LoRa Antenna connector, etc.

