

# RIFA-G BLE to WLAN/WWAN Gateway

## Features

### Bluetooth Feature

- Support ANTZER TECH's proprietary ELSA sensor tag protocol
- Support customized data protocol for Bluetooth pairing mode and data parsing
- Reads 100 BLE devices for advertising mode or 20 BLE devices for pairing mode
- Support BLE 4.2/5.0 devices

### WLAN (WiFi) or WWAN (LTE) Feature

- Support Bi-direction communication with server
- Support MQTT server
- Optional WLAN (WiFi 2.4GHz), LTE Cat-1, LTE Cat-NB1/Cat-M1
- Support e-SIM or Nano SIM card for WWAN module
- Support firmware Over-the-Air (FOTA)<sup>1</sup> upgrade and configuration



[1] LTE Cat-NB1 doesn't support FOTA due to limited data rate

## Introduction

ANTZER TECH's RIFA-G Gateway provides a compact, economic, multifunctional wireless solution for IOT applications. It supports ELSA sensor tag protocol of B-Fresh system. RIFA-G also can support WLAN (WiFi 2.4 GHz) or WWAN (LTE Cat-1 or LTE Cat-NB1/Cat-M1) network for different user scenarios. ANTZER TECH's RIFA-G gateway is a perfect solution for Asset Management, Environmental Monitoring, Cold Chain Logistics.

## Specifications

WLAN	Interface	802.11 b/g/n
	Data Rate	802.11 n (2.4 GHz), up to 150 Mbps
	Configuration	Over-the-air firmware and remote maintenance API
	Protocol Support	Support MQTT
	Range	100M (Open field) with internal antenna
	Security	WPA/WPA2
Cellular Network (Optional)	Frequency Band (WWAN Module Selected)	LTE Cat-1: Band 1,3,7,8,20,28
	Protocol Support	Support MQTT server
	Security	PAP/CHAP
SIM Card	Form Factor	Support e-SIM and Nano SIM (4FF)
Bluetooth	BLE 5.0	IEEE 802.15.4, 2.4 GHz transceiver Supported data rates: 2Mbps, 1 Mbps, 500Kbps, 125Kbps
	Range	70M (Open field) with internal antenna
Configuration		Locally configure by USB Update firmware supported FOTA by WLAN module or WWAN module
Power	Power Input	5V DC power input from micro USB connector WLAN Max.: 1A@5V WWAN Max.: 2A@5V
	Power Mode	Operating mode and sleep Mode
	Min. Power Consumption	<4.5 mA @ 5V (Sleep mode)

LED Indicator		3 LEDs for power, WLAN , WWAN and BLE status
Environment	Operating Temperature	-20 to 60 °C
	Storage Temperature	-30 to 70 °C
	Certificate and Vibration	RoHS, CE, FCC, IC and NCC
	Humidity	10 to 90% R.H. (Non-Condensing) Compliant
Dimension		110 x 60 x 17 mm

## Ordering Information

Networks	Bluetooth	Model Name	Device Type
WWAN LTE Cat-1	BLE 5.0	RIFA-GOLM	With the options of Bluetooth and Network module. Please contact us for special requirements.
WWAN LTE Cat-M1/Cat-NB1	BLE 5.0	RIFA-GOMM	
WLAN+WWAN LTE Cat-1	BLE 5.0	RIFA-GWLM	