RIFA-S Compact-sized GNSS Vehicle Tracker

Features

- Hardwired and Compact-Sized for Easy Installation
- Built-in 3D Accelerometer and High Performing u-blox M8 GNSS module for Vehicle Location Tracking and Illegal Behavior Detection
- Low Voltage Alarm for In-vehicle Battery to Reduce Unnecessary Trouble
- LPWAN (Low-Power Wide-Area Network): Cat1, CatM1/NB-IoT for Cost-effective Management
- Easy-to-Use Web-Interface Platform for Users to Monitor the Vehicle on PC or Mobile Phone
- Optionally Support Untethered Dead Reckoning (UDR) and Automotive Dead Reckoning through CAN bus (CAN-to-ADR)
- Support Over-the-Air FOTA Firmware Upgrade

Introduction

ANTZER TECH's RIFA-S is a hardwired, compact-sized vehicle tracker with GNSS positioning module. The data of the device is transmitted through LPWAN Network under TCP/IP or MQTT protocol. Users could monitor their vehicles easily on the web-interface platform anytime and anywhere. With RIFA-S compact-sized GNSS vehicle tracker, users will receive real-time alerts in case of towing, attempted theft or suspicious movement of the vehicles.
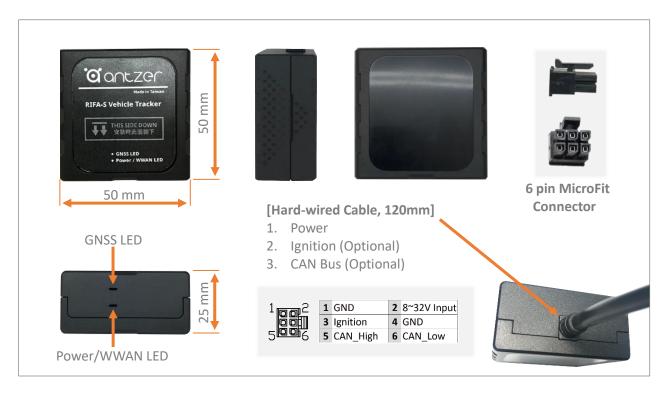
Specifications

General	Vehicle Interface	Hardwired Cable with 6-pin MicroFit Connector for Power, Ignition Signal (Optional SKU with CAN Bus)
Vehicle Network	CAN Bus Protocols (Optional SKU)	ISO15765-4 On-Board Diagnostic and J1939
Cellular Network	Frequency Bands	GSM/GPRS: 900, 1800 Mhz (Only for LARA-R211 SKU)
		HSPA/UMTS: 2100 Mhz (Only for LARA-R280 SKU)
		LTE Cat-1: Band 4, 13 or Band 3, 7, 20 or Band 3, 8, 28
		LTE Cat-M1/NB-IoT: Band 2, 3, 4, 5, 8, 12, 13, 20, 28
	Data Protocols	TCP, UDP or MQTT
Wireless Network	Bluetooth (Optional SKU)	2.4GHz Low Energy Bluetooth Class 2
GNSS	Chipset	u-blox M8 Engine, 72 Channels support GPS, Galileo, GLONASS, BeiDou
	Dead Reckoning (Optional SKU)	Optionally Support UDR or CAN-to-ADR
Sensor		3-Axis Accelerometer
LED Indicator		x2 LEDs (Green: GPS, Blue: Cellular Network, Red: System Status)
SIM Card	Form Factor	Nano SIM (4FF) or Embedded-SIM
SD Card	(Optional SKU)	Micro SD for Data Logging
Configuration Port		Micro-USB Port for Configuration Firmware Update Over-The-Air through Cellular
Power	Power Input Range	8~32V DC Power Input
	Power Mode	Operating Mode and Sleeping Mode
	Min. Power Consumption	<3mA @ 12V (Sleeping mode)

Environment	Operating Temperature	-20 to 70 °C (With Battery); -30 to 75 °C (Without Battery)
	Storage Temperature	-40 to 85 °C
	Certificate and Vibration	NCC, RoHS and MIL-STD-810G 514.6C-1 Category 4 - Common Carrier
	Humidity	10% to 90% R.H. (Non-Condensing)
Dimensions		50 x 50 x 25 mm (Without Hardwired Cable)
Battery	Lithium Ion Polymer Battery	Optionally support Built-in 3.7V 185mAh Battery

Dimensions

50 mm

50 mm

GNSS LED

25 mm

Power/WWAN LED

[Hard-wired Cable, 120mm]
1. Power
2. Ignition (Optional)
3. CAN Bus (Optional)

6 pin MicroFit Connector

1	GND	**2**	8~32V Input
3	Ignition	**4**	GND
5	CAN_High	**6**	CAN_Low

Ordering Information

Networks	Model Name
4G LTE Cat 1	RIFA-SxL
4G LTE Cat-M1/NB-IoT	RIFA-SxM

Details of Optional SKU		
Feature	**Default**	**Description**
GNSS	●	Standard GNSS
		GNSS with DR (Dead Reckoning)
Bluetooth		2.4GHz Low Energy Bluetooth Class 2
Back-up Battery		3.7V 185mAh Li-Ion Polymer Battery
CAN Bus		Supports OBDII or J1939 protocols
SIM Card	●	Nano SIM (4FF)
		Embedded-SIM
SD Card		Micro SD

Accessories

Part Number	Description
T1700000027	Cable RIFA-S, 6P to 3 wires@22AWG, L=600mm (Car Power Input, Ignition, GND)
T1700000028	Cable RIFA-S, 6P to OBDII Connector for Car Power, L=600mm (Car Power Input, GND)