

RFID READER

Introduction & Tutorial

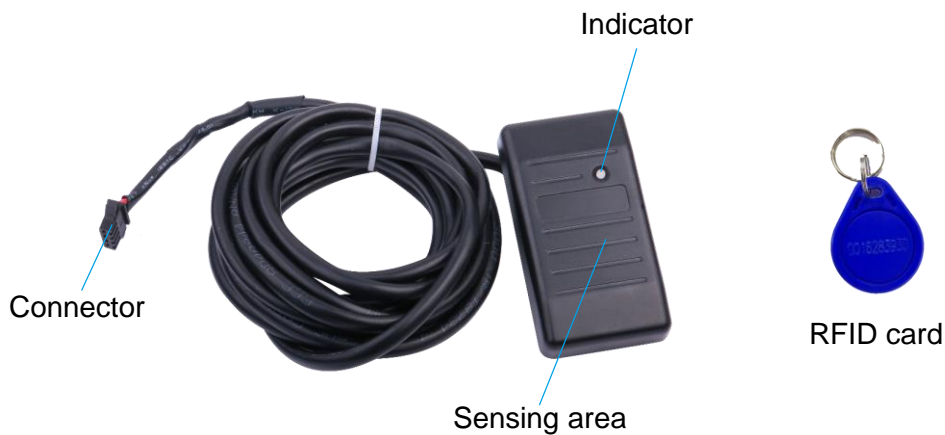
Version 1.0

1. Introduction

An RFID reader is used for identifying the drivers as they are requested to start vehicles with their RFID cards. When a card is sensed, the tracker will upload relevant data collected by RFID reader to platform. In this way, fleet managers can gain insights into that who has driven the vehicle, and when.

For some trackers, RFID reader can be used for driver authentication as the tracker can judge whether the card is authorized, and a driver without an authorized card is unable to drive the vehicle.

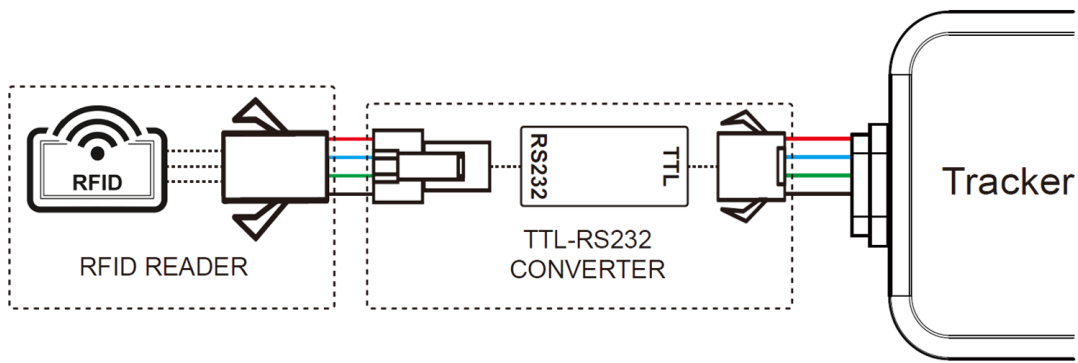
2. Picture



3. Specification

Operating voltage	5V DC
Working current	<50mA
Communication interface	RS232
Baud rate	9600
Frequency	125kHz (Low frequency)
IP rating	IP65
Working temperature	-10°C - 50°C
Induction distance	0-5cm

4. Wiring diagram



5. Supported devices



GT06E



X3



JM-VG04

6.1 Commands of GT06E

- **Function: Turn on/off RFID function**

Command: `WSTC,A,B,C#`

A=ON/OFF, turn on/off data transmission of communication interface.

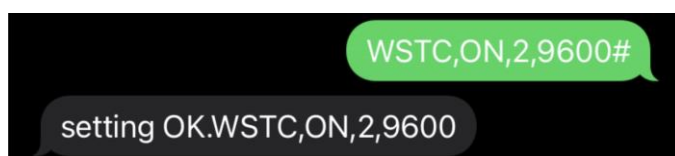
B=1, peripheral type 1, reserved for users.

B=2, peripheral type 2, specific for RFID reader.

B=3, peripheral type 3, specific for temperature sensor.

C=BPS, Baud rate of the interface, optional value: 4800, 7200, 9600, 19200, 38400, 57600, 115200.

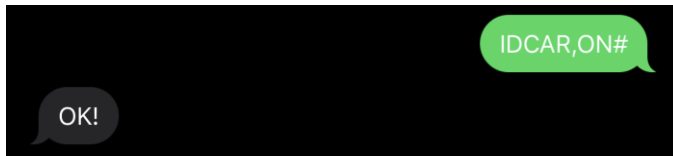
Note: When setting this function, any parameter can't be omitted or missed, also the Baud rate ought to be correct.



6.2 Commands of X3 & JM-VG04

- **Function: Turn on/off the power supply of communication interface**

Command: `IDCAR,ON/OFF#`



- **Function: Activate/block data transmission of communication interface**

Command: `WSTC,ON,X#` (X=1-3)

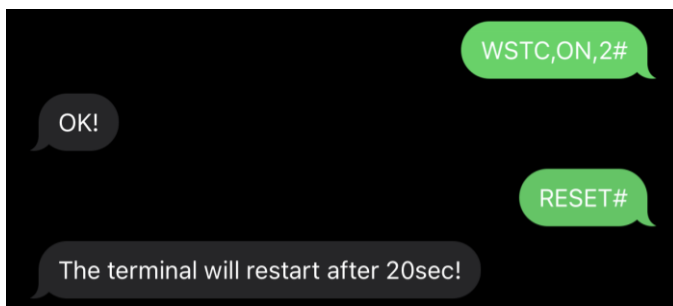
X=1, reserved for common peripheral, Baud rate is 115200.

X=2, specific for RFID reader, Baud rate is 9600.

X=3, specific for temperature sensor, Baud rate is 9600.

Note: When this command `WSTC,ON,X#` is sent, to function it you have to restart the device by sending command `RESET#`, or you can restart manually.

Note: For customers using third-party platforms, X=2 or X=3 is suitable for other peripherals whose Baud rate is 9600.

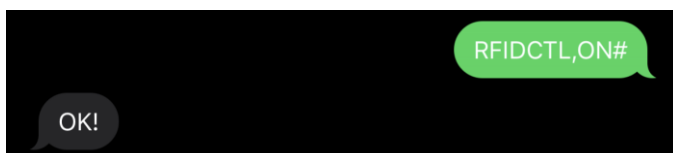


- **Function: Activate/block RFID authentication**

Command: `RFIDCTL,ON/OFF#`

If this function has been activated, when ACC is off, only an authorized RFID card can recover power supply, meanwhile, the data can be uploaded.

If this function has been blocked, the tracker only uploads the data.



- **Function: Select the mode of authentication**

Command: `RFIDMODE,X#` (X=0-3)

X=0, local authentication mode, the data of authorized RFID card only be stored at local.

X=1, server authentication mode, the data will be uploaded to sever for identification.

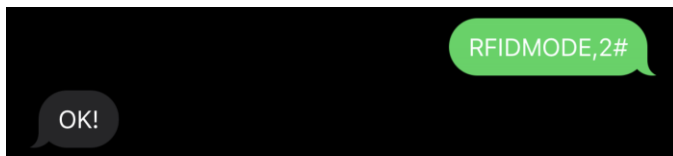
X=2, Local & sever authentication mode, the data will be identified at local, if there is no

matched RFID number, then be uploaded to sever for identification.

X=3, non-authentication mode (**DEFAULT** mode).

Note:

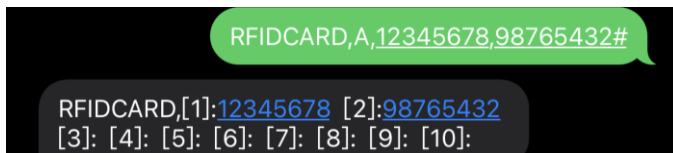
- This command `RFIDMODE,X#` can only be set by central number.
- This command is related to RFIDCTL command. When RFIDCTL has been blocked, if activate RFIDCTL again, RFIDMODE will automatically return to the previous mode instead of refresh.
- When X=1-2, without an authorized card sensed, vehicle power is always cutoff; when X=3, no matter an authorized card is sensed or not, vehicle power is always connected.



● **Function: Authorize RFID cards**

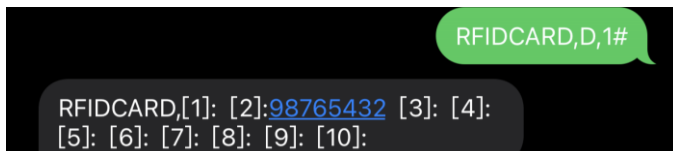
Command: `RFIDCARD,A,ID1,ID2...#`

Add authorized RFID number (At most 10 numbers, each number ought to be less than 15 bytes).



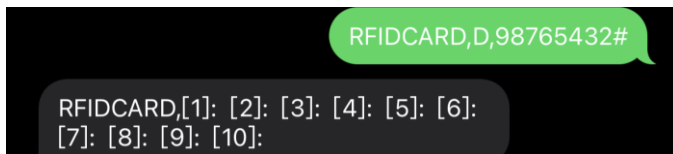
Command: `RFIDCARD,D,X#` (*X is the serial number [1]. [2]. [3].....*)

Delete authorized RFID number with corresponding serial number.



Command: `RFIDCARD,D,ID#`

Delete RFID number by their digits.



● **Function: Set RFID alert**

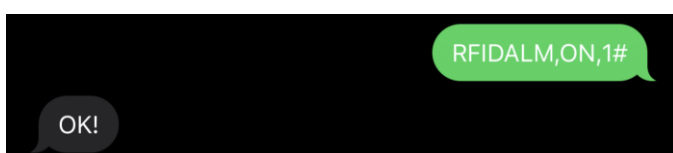
Command: `RFIDALM,A,M#`

Explanation: If the RFID card detected is not authorized, the tracker will send an alert.

A=ON/OFF, turn on/off RFID alert.

M=0: alert by platform only.

M=1: alert by platform & SMS.

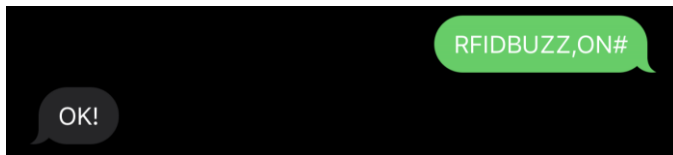


- **Function: Buzzer alarm (X3 available only)**

Command: [RFIDBUZZ,ON/OFF#](#)

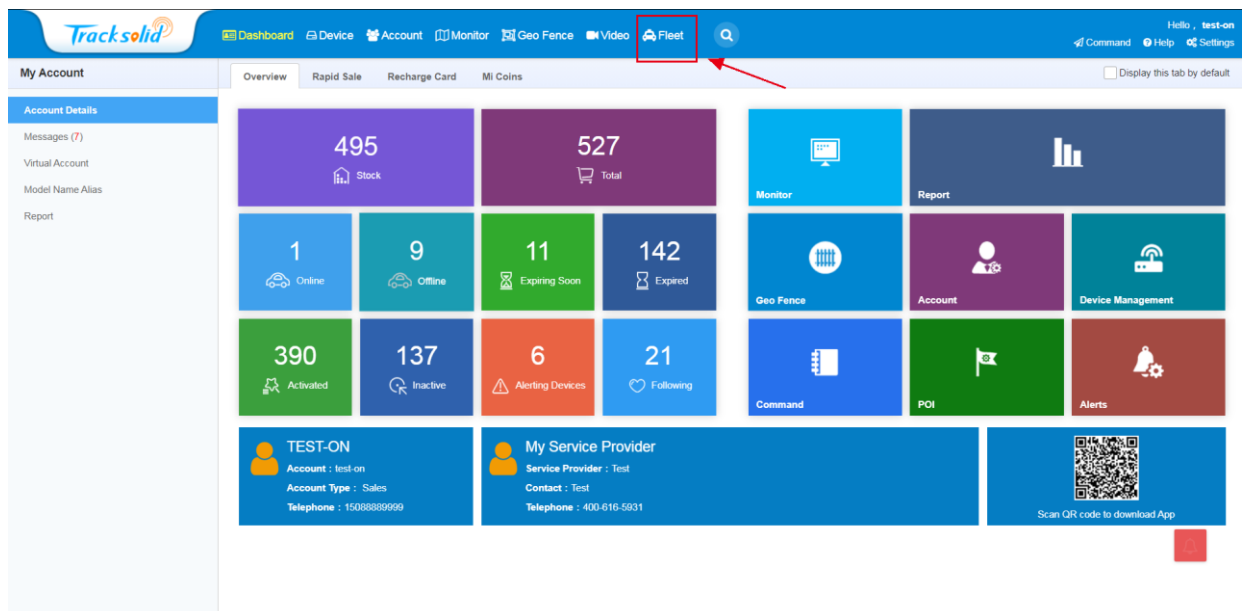
If this function is activated, when ACC is ON, the buzzer starts to alarm intermittently until the driver taps an authorized RFID card.

Note: This function is default OFF.

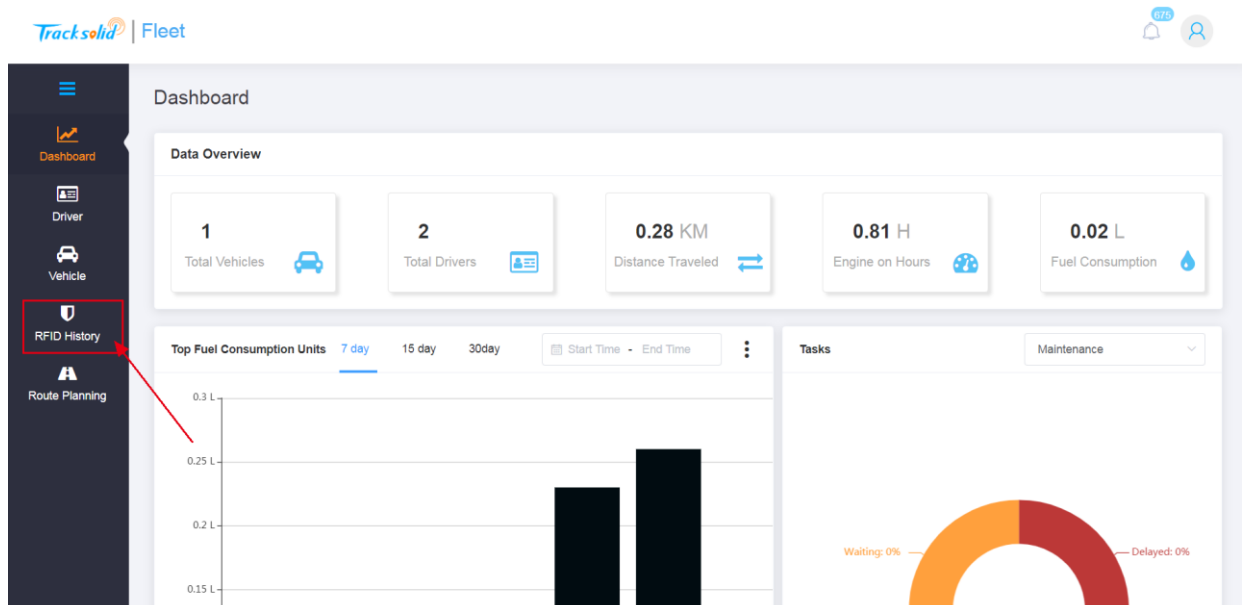


7. Platform

1) Click “Fleet” on homepage.



2) Click “RFID History” on the left column.



3) Select the time period or input RFID card number to check the history.

The screenshot displays the 'RFID History' page in the Traksolid Fleet application. At the top left, the 'Traksolid | Fleet' logo is visible. On the right, there are notification and user profile icons. A dark sidebar on the left contains navigation options: Dashboard, Driver, Vehicle, RFID History (highlighted), and Route Planning. The main content area features a search interface with a 'Card ID' input field, a date range selector set to '2020-05-15' to '2020-05-16', and a blue 'Search' button. Below this is a table with the following columns: 'No.', 'Card ID', 'IMEI', 'Driver Name', 'Vehicle Name', 'License Plate No.', and 'Operation Time'. The first three columns of the table are enclosed in a red rectangular box. A red arrow points to the 'Search' button.

No.	Card ID	IMEI	Driver Name	Vehicle Name	License Plate No.	Operation Time
1	2500F9DE8C	351510091274640				2020-05-15 17:11:13
2	2500F9DE8C	351510091274640				2020-05-15 17:09:34
3	2500F9DE8C	351510091274640				2020-05-15 17:09:24
4	2500F9DE8C	351510091274640				2020-05-15 17:09:24
5	2500F9DE8C	351510091274640				2020-05-15 17:08:19
6	2500F9DE8C	351510091274640				2020-05-15 17:05:40
7	2500F9DE8C	351510091274640				2020-05-15 17:05:38
8	2500F9DE8C	351510091274640				2020-05-15 17:05:37
9	2500F9DE8C	351510091274640				2020-05-15 17:05:25