VT300 Series Vehicle Telematics Gateway User Manual-EN 1.1

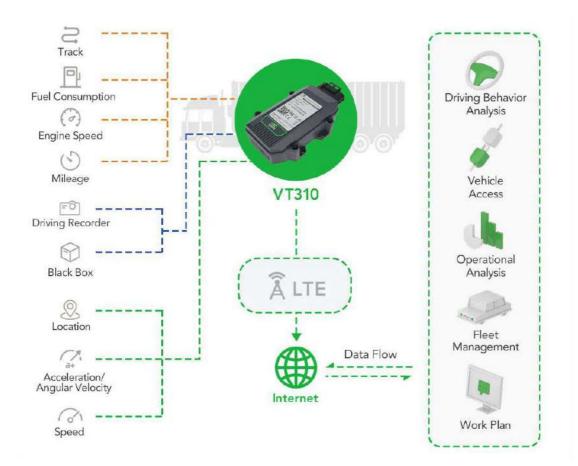


Chapter I Product Introduction and Preparation

1. Introduction

1.1 Overview

The VT300 series vehicle tracking gateway is an asset tracking product that features cost-effectiveness, rich interfaces and strong performance. It is suitable for industries such as logistics and transportation, engineering vehicle monitoring and so on. It offers precise positioning with GNSS, tracking and monitoring the status, history track, geofencing, abnormity alarm and other functions of vehicles and drivers, combined with the vehicle network cloud platform, can realize remote vehicle management, asset tracking, preventive maintenance, helping fleet operators save costs and improve efficiency. The device provides sub-models that support wireless network access of various speeds such as LTE CatM1, Cat1, Cat4, etc.



1.2 Packing List

1.2.1 Standard Packing List

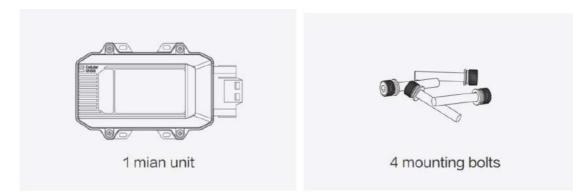


Image 1-2-1

1.2.2 Optional Accessories

Optional accessories are not included in the default equipment package and need to be selected according to the actual situation.

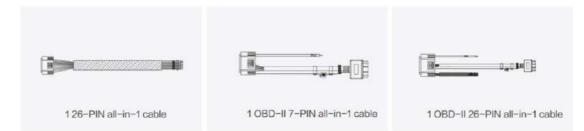


Image 1-2-2

Communication Cable	Order Number	Specifications
26PIN all-in-one test cable	SCAB000229	The cable has P1 and P2 ends: P1 is 26PIN female, connected to VT310; P2 is open end, which requires a 9- 48V adaptor. Suitable for engineering environments and indoor tests.
OBD-II7 PIN all-in-one cable	SCAB000231	The cable has P1, P2 and P3 ends: P1 is 26PIN female connected to VT310; P2 is OBD-II male connected to the vehicle; P3 is ignition signal terminal connected to the ignition on/off. Suitable for heavy trucks with OBD-II vehicle diagnostic interfaces, and powers VT310 through interfaces.
OBD-II 26 PIN all-in-one cable	SCAB000232	This cable has P1, P2, P3 and P4 ends: P1 is 26PIN female connected to VT310; P2 is OBD-II male connected to the vehicle; P3 is open end that includes I/O, RS232-1 and 1-Wire; P4 is ignition signal terminal connected to the ignition on/off.

Suitable for heavy trucks with OBD-II
vehicle diagnostic interfaces, and
powers VT310 through interfaces.
Recommended for customers who
need DI, DO, AI, 1-Wire devices or
vehicle-mounted controllers.

1.3 Product Appearance

1.3.1 Product Appearance Introduction

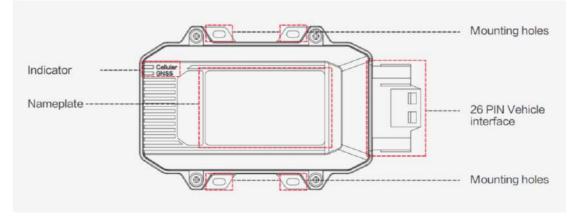
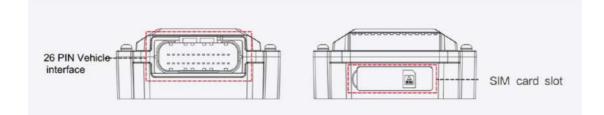
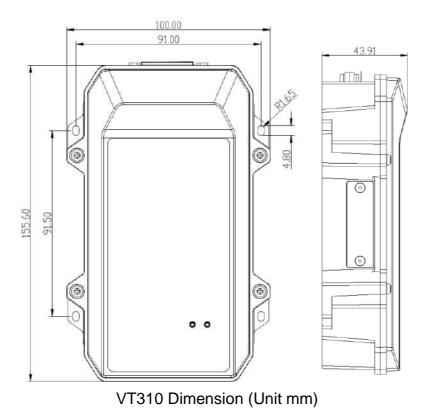


Image 1-3-1



1.3.2 Product Dimensions

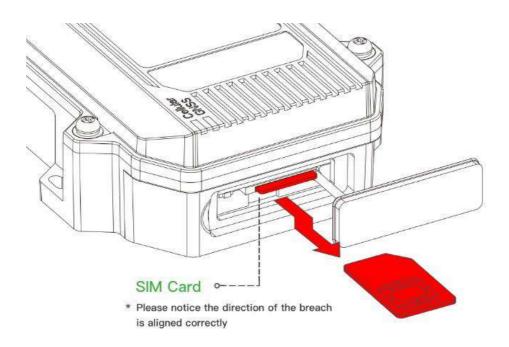


2. SIM and Cable Installation

For general cases, the device can be used after mounted onto the vehicle, with SIM card inserted and cable installed.

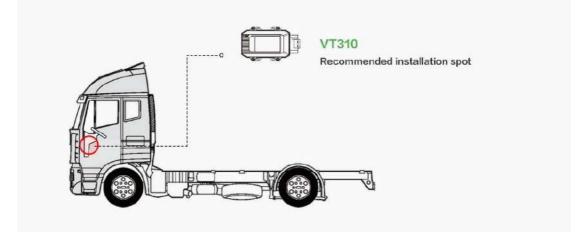
2.1 Install SIM Card

In the case of dial-up Internet access, a SIM card is needed. The VT310 will dial automatically once it is powered and started. Open the waterproof baffle on the downside of the VT310 and insert the SIM card into the slot in the direction shown in the picture.



2.2 Mount the Tracker

Customers can fix the VT310 onto the vehicle with installation bolts. It is recommended that the tracker be installed under the front windshield of the vehicle, where GPS signal is better received and connection to the OBD-II diagnostic interface is easier.



2.3 Introduction and Use of Cables

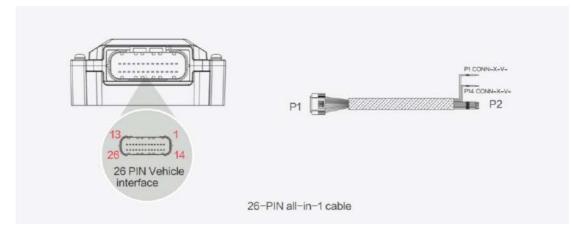
We offer three types of cables for different application scenarios. Wiring methods of them will be shown below respectively.

2.3.1 26PIN All-in-one Test Cable Link

This cable is suitable for indoor testing and the tracker login. A 9-48V adapter or 9-48V AC/DC power supply, a DB9-RS232 serial port female connector and a USB to serial port line are required, as are shown below.

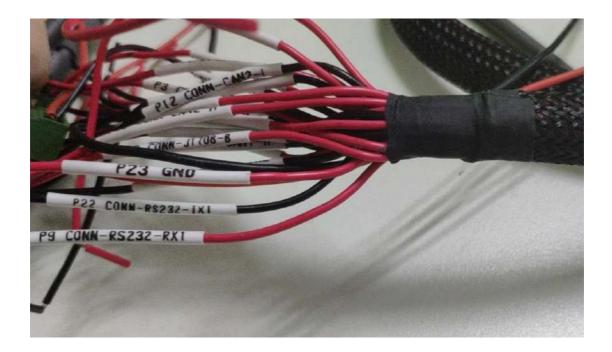


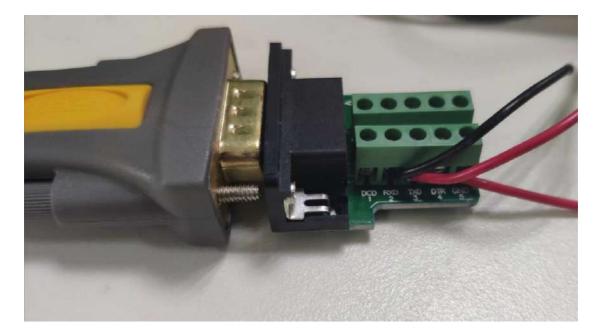
From left to right: Power supply module DB9-RS232 female connector, USB to serial port line



Steps:

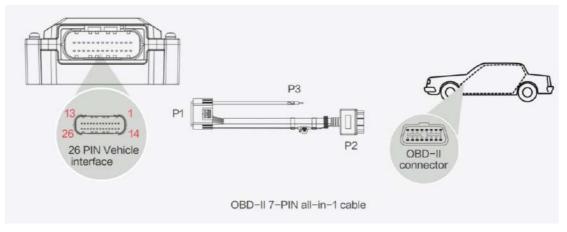
- 1. Insert the 26PIN female head of P1 into the VT310;
- Connect P1 CONN-X-V- and P14 CONN-X-V+ to the negative and positive poles of the power adapter respectively. P15 CONN-X-IGT and V + are both connected to the positive side of the power supply;
- 3. Connect the CONN-RS232-RX1, CONN-RS232-TX1 and GND (any) of the cable to the TXD, RXD and GND holes of the DB9 connector. Then connect the USB to DB9 cable to the computer, as is shown below.





2.3.2 OBD-II 7PIN All-in-one Test Cable

Suitable for heavy trucks with OBD-II diagnostic interfaces. The VT310 is powered by the ODB diagnostic interface, so the vehicle needs to be started to get the VT310 working.



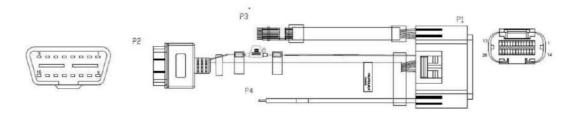
Steps:

- 1. Insert the 26PIN female head of cable P1 into the VT310;
- 2. Connect P2 to the OBD-II diagnostic interface of the vehicle;
- 3. If you need to judge whether the vehicle is ignited, you can connect P3 to the ignition switch of the vehicle.

2.3.3 OBD-II 26PIN All-in-one Test Cable

Suitable for heavy trucks with OBD-II diagnostic interfaces. The VT310 is powered by the diagnostic interface, so the vehicle needs to be started to get the VT310 working.

Compared with the OBD-II 7-pin all-in-one test cable, a 19-pin I/O bare wire end is added. This is recommended for customers with demand for I/O or 1-Wire hardware access.

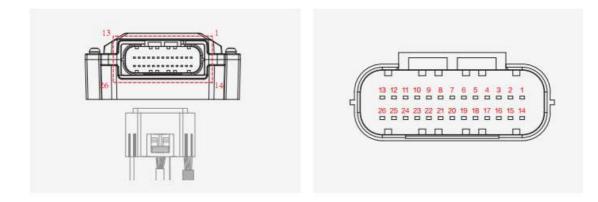


Steps:

- 1. Insert the 26PIN female head of cable P1 into the VT310 interface;
- 2. Connect P2 to the OBD-II diagnostic interface of the vehicle;
- 3. If you need to judge whether the vehicle is ignited, you can connect P3 to the ignition switch of the vehicle;
- 4. For P3 bare wire, you can connect your I/O devices according to your needs, which will be described later.

2.4 Connect to the I/O Interface

The I/O interface is integrated into the 26PIN vehicle interface, providing 3 digital outputs (max. current 300mA), 4 digital inputs, 1 analog input, 1 1-Wire, an RS232 serial port and an ignition signal. Following is an example of how to use the I/O interface.



2.4.1 Definition of 26PIN Interface

PIN	Name	PIN	Name	PIN	Name	PIN	Name
1	V-	8	1-Wire	14	V+	21	GND
2	GND	9	RS232_RX	15	IGT	22	RS232_TX
3	DI2	10	GND	16	DI1	23	GND
4	DI4	11	CAN_1L	17	DI3	24	CAN_1H
5	GND	12	CAN_2L	18	GND	25	CAN_2H
6	DO2	13	J1708_B	19	DO1	26	J1708_A
7	AI			20	DO3		

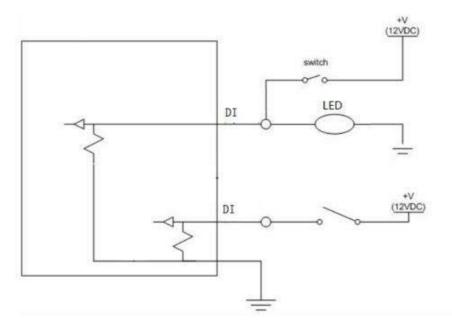
2.4.2 RS232 Serial Port

The RS232 serial port is used for debugging. Connect the RS232_RX, RS232_TX, and GND of the VT310 to TXD, RXD, and GND of the DB-9 serial port welding-free interface. Use RS232 to USB cable to connect with DB-9 serial port surface welding port.

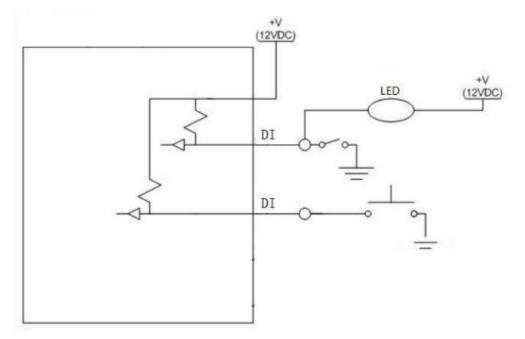
2.4.3 Digital Input (DI)

The DI can detect the switching value, such as whether the button is pressed or bounced, and whether the switch is on or off. The VT310 provides configurable pull-up. The DI has a default $10k\Omega$ resistor pulled down to GND. When the DI is configured to pull up, there is a $20k\Omega$ resistor pull up to the power supply voltage. When using DI, it is necessary to distinguish between pull-up and no pull-up.

When the DI has no pull-up power supply, the external circuit is connected as follows:

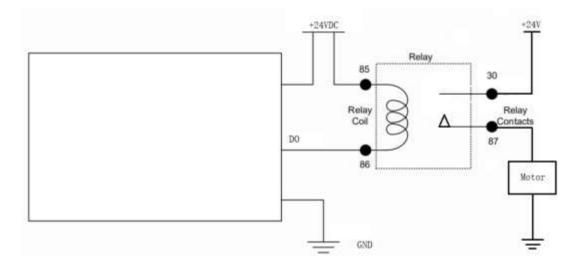


When the DI has a pull-up power supply, the external circuit is connected as follows:



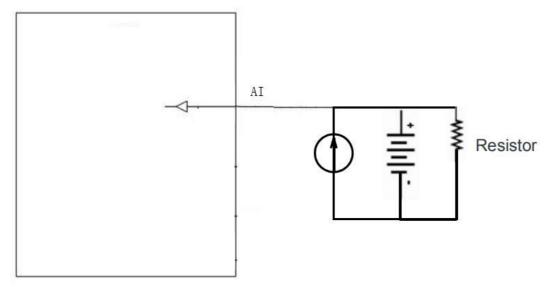
2.4.4. Digital Output (DO)

The DO can output DC voltage. The DO is an open-leakage output that supports a current of 300mA and usually works with relays.



2.4.5. Analog Input (AI)

The AI can detect DC voltage, and customers can directly access the analog quantity of voltage. External circuit is connected as follows:



2.4.6. 1-Wire

The 1-Wire is usually used for small communication equipment, such as digital thermometers and iButton devices. Before use, the customer needs to connect the DQ pin (signal line) of the 1-Wire device to the VT310 PIN8, and connect the VDD and GND pins of the 1-Wire device to the GND of the VT310. The sensor is the less02b type. The following picture shows the water temperature detection wires of the 32 digital temperature sensor probe.



2.4.7 Ignition Sense

IGT(Ignition sense): IGT is used to connect to the Ignition switch of the vehicle. The VT310 can detect whether the connected vehicle is ignited. When using the 20PIN cable for testing, connect the IGT cable and V+ cables to DC power supply.

3. Start the VT300

After the customer completes the installation according to the above steps, the device can be started for debugging. The condition of the device can be told through the status indicator. To avoid consumption of battery power during transportation, the device is under transportation mode in the factory state. The VT310 needs to be activated by external power supply or the vehicle diagnostic interface.

3.1 GNSS Status Light

Indicator Status	Function status
Long annihilation	The device is not started or the GNSS function is disabled.
Flash (frequency: 0.5Hz)	GNSS 授时成功 GNSS delivery successful
Slow flash (frequency: 1Hz)	GNSS function enabled
Solid	Location success 定位成功

3.2 Cellular Status Light

Indicator status	Function status
Long annihilation	The device is disabled or the dialing function is disabled.
Flash (frequency: 0.5Hz)	Dialed successfully
Slow flash (frequency: 1Hz)	Dialing enabled

Chapter II Login and Device Configuration

1. Install the Configuration Tool

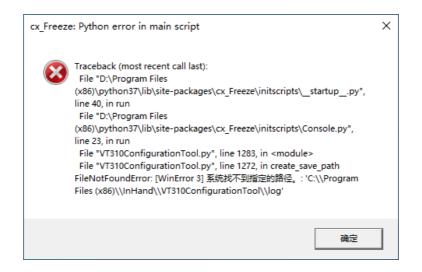
The tool software supports the installation OS environment: Windows 10;

1.1 Download Configuration Tools

Enter the Download Center of InHand's <u>Website</u>, and download the tool from the Vehicle Gateway Part >>InVehicle T310 Tracker. Download the configuration tool installation package in the product documentation. Select the default path to complete the installation, as is shown below.

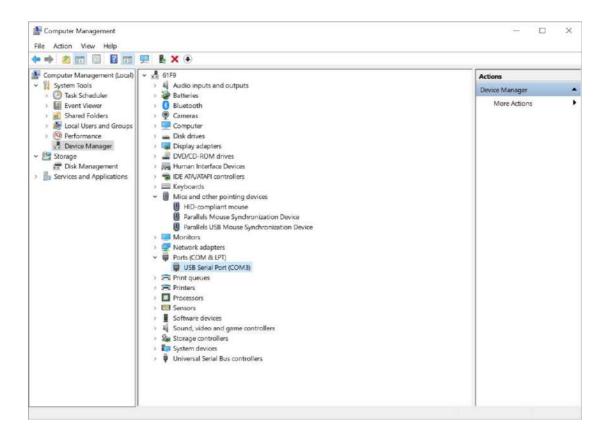


 If the following error occurs after installation, choose "Run as administrator" to open the software, as is shown below.



1.2 Search for the COM Port Number

Power the VT310 with an external adapter through the 26PIN all-in-one test cable. The VT310 is connected to the computer through a USB to serial port cable. If the GNSS or cellular light flickers, the device is started successfully. Enter the device management page of the computer and observe the COM slogan in the "device manager"> "ports (COM and LPT)" of the computer, as is shown below.



1.3 Login to the Device



appears, open it as an administrator.

Click "Connect device", enter the user name and password (default:

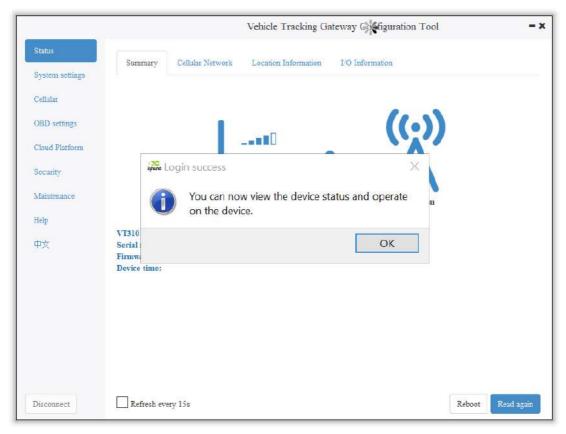
admin/123456), select the recorded serial port, baud rate (default: 115200), and click "connect", as is shown below.

Connect to VT310						
Connectio V1510						
Username	Connect via	serial port	Connect via	bluetooth		
admin		COMB		-	Deces Card	
Password	Serial port	COMB			Kerlesn Sena	
	Baud rate	115200		•		
Forget password?						
	Property	8 -	None 💌	1 •		
	admin Password	Username Connect via s admin Serial port Password Baud rate Forget password?	Username admin Password Forget password? Connect via serial port Serial port COM3 Baud rate 115200	Username Connect via serial port Connect via admin Serial port COM3 Password Baud rate 115200 Forget password?	Username Connect via serial port Connect via bluetooth admin Password max Baud rate 115200	Username Connect via serial port Connect via bluetooth admin Scrial port COM3 Refresh Serial Baud rate 115200 Interval to the series of the series

You can also use computer Bluetooth (4.2 or above) to connect the device. Click "Connect device", enter the user name and password (default: admin/123456), select the Bluetooth device with the same name as the device SN (SN can be found on the device nameplate), and click Connect ", as is shown below.

		Vehicle Tracking Gateway Configuration Tool
Status System setting	Summary Cell	lular Network Location Information I/O Information
Cellular OBD settings	Connect to VT310	
Cloud Platform	Username	Connect via serial port Connect via bluetooth
Security Maintenance	Password	Select Device Please select a device Refresh Device List
Help		
中文	Forget password?	
		Cancel
Connect	Refresh every 15s	s Reboot Read again

In the dialog box that pops up, you can view the device status and perform operations on the device. Click OK to preview or modify the configuration, as is shown below.



Login succeeded

2. Inquire Status Information

2.1 Mobile Network Parameters

On this page are mobile network link parameters, which are used mainly to check whether the wireless network link is normal. All parameters read when the SIM is not inserted are default parameters. After the device is connected to the Internet through the SIM card, it can obtain the IP address for data transmission. For configuration of mobile network parameters, please refer to <u>Section 4 Configure the Cellular Network</u>.

Parameter	Description
Signal value	Indicates the signal strength of the connected wireless network. Valid values: 0 to 31.
MCC/NMC	MCC (mobile country code), MNC (mobile network code), read from the SIM card

SIM card status	Normal/Unidentified
IMEI	The International Mobile device identification code (International Mobile Equipment Identity) is the built-in dialing module code of the vehicle gateway.
Registration	Registered/Not registered
LAC	LAC(Location area code), obtain this parameter from the base station after dialing successfully
IMSI	IMSI(International Mobile Subscriber Identity) this parameter is read from the SIM card
CELL ID	This parameter is obtained from the base station after dialing successfully.
ICCID	The ID of the integrated circuit card is the SIM card number and ICCID (integrated circuit card identity). This parameter is read from the SIM card.
IP ADDRESS After the dialing is successful, the carrier assigns the address of the network access.	
Cellular status	Connected/Not connected
Authentication method	CHAP/PAP

Status						
	Summary	Cellular Network	Location Information	I/O Information		
System Settings						
Cellular	Physical	Layer Inform	ation:			
OBD Settings	Module status	: Normal	IMEI:	352835102369918	CELL_ID:	71CF520
	Signal Level:		Registration status:	Construction of the second	ICCID:	8986011880238917531
Cloud Platform	MCC/MNC: SIM status:	460/01 Normal	LAC: IMSI:	EA00 460010100114835		
Security	SIM status:	INOrmal	IMSI:	400010100114835		
occurry	Network	Information:				
1-Wire	Network	mormanon.				
Maintenance	Ip address:		10.1.125.130	Authentication:	CHA	P certification
Mannenance	Cellular netwo	ork status:	Connected			
Help						
中文						

2.2 Location Information

The location information page shows the latest parameters obtained by the GNSS module. It includes location information and related parameters of the inertial sensor. As is shown below.

			Vehicle Tracking	Gateway Confi	guration Tool	14
Status System settings	Summary	Cellular Network	Location Information	I/O Informat	on	
Cellular	Location	Information:				
OBD settings	Longitude: Altitude:	104.053		Latitude: Satellites:	30.58 10	8234 °N
Cloud Platform	Speed: HDOP:	0.00000	0 knot	Course: Status:	0.000 Fix	° 000
Security	Dead Rec		N.	status.	PX	
Maintenance	Deau Iter	Koming.				
Help	Acc X Axis: Gyro X Axis:	-9.028000 mg -910.000000 mdps	Acc Y Axis: Gyro Y Axis:	7.554000 mg 0.000000 mdps	Acc Z Axis: Gyro Z Axis:	-993.080017 mg -280.000000 mdps
中文						
Disconnect	Refresh eve	ry 15s				Reboot Read agai

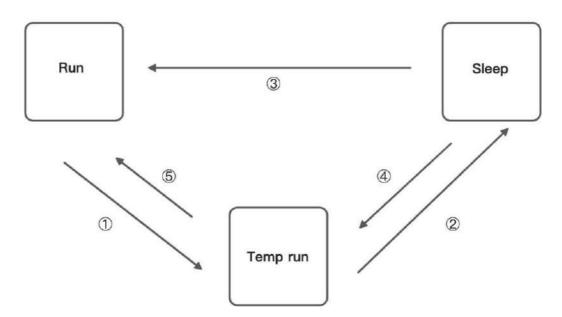
2.3 I/O Information

	Vehicle Tracking	g Gateway Configuration Tool
Status	Summary Cellular Network Location Informatio	I/O Information
System settings	Summery Contain Network Docardin Information	
Cellular	I/O Information:	
OBD settings	Ignition Signal:	High
	Digital Input 1:	Low
Cloud Platform	Digital Input 2:	Low
	Digital Input 3:	Low
Security	Digital Input 4:	Low
30	Analog Input[mv]:	0
Maintenance		
	1-Wire:	
Help		
	1-Wire Type:	Unknown
中文	1-Wire ROM ID:	Unknown
	1-Wire Data:	Unknown
		(- real free to be a second s
Disconnect	Refresh every 15s	Reboot Read again

3. System Settings

3.1 Sleep Mode

The sleep mode ensures the battery life after flameout, providing continuous guarantee for special environments. The state machine is as follows:



Description of the state machine:

Run, Sleep, and Temp run represent normal running status, sleep status, and temporary running status respectively.

(1) Corresponding to the state machine, the condition from Run to Temp run is that the power supply voltage is less than sleep voltage (6V by default) or IGT OFF (IGT needs to be enabled in the configuration), by default, the device continues to run for 15Stemp (for reporting information) and then enters Sleep.

② Corresponding to the state machine, the condition of entering Sleep from the Temp run is that after the device runs a wake-up runtime cycle in the Temp run or after the device runs Temp Run for 15s from run.
③ Corresponding to the state machine, the condition from Sleep to Run is that the power supply voltage is greater than Sleep voltage or IGT ON (IGT needs to be enabled in configuration).

④ Corresponding to the state machine, the condition of entering the Temp run from Sleep is that after the device runs a wake-up interval in Sleep.

(5) Corresponding to the state machine, the condition from Temp run to Run is that the power supply voltage is greater than sleep voltage or IGT ON (IGT needs to be enabled in configuration).

Parameter	Description
Enable IGT	After IGT is enabled, the device uses the IGT status as the condition for entering or exiting Sleep. The IGT status is not ticked by default.
Wake-up interval	The interval between the device automatically wakes up in Sleep, whose default value is 120 minutes.
Wake-up time	The interval between the time when the device enters the next Sleep, whose default value is 5 minutes.

Configure the sleep mode:

			Vehicle Tracking Gateway Configuration Tool	17
Status	Sleep mode	Account		
System settings	ship most			
Cellular	Enable IGT			
OBD settings	Wakeup interv	al	0	Minutes
Cloud Platform	Wakeup runtin	ne	5	Minutes
Security				
Maintenance				
Maintenance Help				
Help				
felp				
felp				
Help				

3.2 Account Settings

This function allows the device administrator to modify the device administrator login information. The default administrator account is admin, password 123456. The device administrator can modify the configuration options if necessary. After the modification, the device prompts a restart. Click OK to restart the device and log in with the modified administrator account and password. As is shown below.

			Vehicle Tracking Gateway Configuration Tool	
Status	Sleep mode	Account		
System settings	Administrator	account		
Cellular		BCCOURT		
OBD settings	Administrator	password		
Cloud Platform	Confirm passy	vord		
Security				
Maintenance				
Help				
Maintenance Help 中文				
Help				

4. Configure the Cellular Network

Click "Cellular" to enter the configuration page. Generally, customers only need to configure "Network Access Point Name (APN)", "Network dialing user name", "Network dialing password" and "Authentication mode" and click "Save configuration". The device takes effect after restarting. If the customer has special trial scenarios, click "Show Advanced Options" to see hidden configuration items. Configure the network dial number, PIN, and default host APN as needed. As is shown below.

Status			
System settings	APN	uninet	
Cellular	Network dial username	gprs	
OBD settings	Network dial password		
Cloud Platform	Authentication mode	Auto	•
Security			1
Maintenance	Show Advanced Option		
Help	Network dialing number	*99***1#	
中文	PIN		
	Default bearer APN	uninet	

Parameter	Description		
APN	This parameter is required when the APN private network is connected to the mobile network. Most public network service SIM cards do not authenticate APN when dialing.		
Network dialing username	The default parameter is "gprs". When the private network is AAA certified, the mobile network operator needs to provide this parameter.		
Network dialing password	The default parameter is "gprs". This is required by the carrier during the AAA certification for the private network.		
Authentication mode	Automatic/CHAP/PAP. This parameter is required when the private network is AAA certified. Automatic: take turns to use PAP and CHAP authentication to dial (pap authentication is used for the first power-on, if dialing fails, chap authentication is used for dialing again, and pap authentication is used for the next dialing, and so		

	on. If the authentication mode is not automatic, but PAP or CHAP, use only PAP or CHAP authentication to dial.
Network dial number	The default parameter is * 99 *** 1#, which is required
	by mobile network operators.
	PIN (Personal Identification Number) refers to the
	Personal Identification password of the SIM card. When
PIN	the SIM card is enabled for PIN verification, does it fill in
	the corresponding PIN of the SIM card. This parameter
	is required for mobile network operators.
Default carrier APN	This parameter is provided by the carrier.

▲ The default host setting is a function for special data transmission required by some carriers, which generally does not need configuration. If configuration is required, please inquire from your carrier.

5. Configuration of Vehicle Diagnostic

Interface

The on-board diagnostic interface is the South interface of the tracker and the configuration option of the protocol.

5.1 Configure ODB Interface

In the configuration tool, select OBD as the diagnostic protocol. The ODB protocol is the CAN2 interface and J1708 interface of the vehicle tracker.

Parameter	Description	Others
J1939/J1979	ODB CAN2 interface protocol, corresponding to physical layer PIN CAN_2L(PIN 12) and CAN_2H(PIN 25)	OBD default configuration

J1939	ODB CAN2 interface protocol, corresponding to physical layer PIN CAN_2L(PIN 12) and CAN_2H(PIN 25)	
J1939	ODB CAN2 interface protocol, corresponding to physical layer PIN CAN_2L(PIN 12) and CAN_2H(PIN 25)	
J1708	J1708 interface protocol, corresponding to physical layer PIN J1708_ B(PIN13) and J1708_A (PIN 26)	
Auto	When set to Auto mode, the vehicle tracker will poll the link and automatically poll and send the protocol data of the above four options for link testing. When receiving data packets of the corresponding protocol, the vehicle tracker will choose this protocol for communication.	When Auto mode is used, the CAN1 and J1708 interfaces are enabled at the same time.
Disable	Disable ODB CAN2 and J1708	

		Vehicle Tracking Gateway Confi	guration Tool	- 3
Status	OBD CAN1			
System settings	USD CAN			
Cellular	Protocol type	J1939/J1979		
OBD settings		J1939/J1979 Auto		
Cloud Platform		J1939		
Security		J1979 J1708		
Maintenance		Disable		
Help				
中文				
Disconnect			Read again Save co	nfigurations

5.2 Configure CAN1 Interface

In the configuration tool, select CAN1 as the diagnostic protocol and the

CAN1 interface of the vehicle tracker.

Parameter	Description	Others
J1939/J1979	CAN1 interface protocol, corresponding to physical layer PIN CAN_1L(PIN 11) and CAN_1H(PIN 24)	CAN1 default configuration
J1939	CAN1 interface protocol, corresponding to physical layer PIN CAN_1L(PIN 11) and CAN_1H(PIN 24)	
J1939	CAN1 interface protocol, corresponding to physical layer PIN CAN_1L(PIN 11) and CAN_1H(PIN 24)	

able	Disable	e CAN1	
		Vehicle Tracking Gateway Configuration Tool	- ×
tus	OBD CAN1		
ystem settings ellular	Protocol type	J1939/J1979 ·	
3D settings oud Platform curity aintenance 頃		J1939/J1979 J1939 J1979 Disable	
sconnect		Read again Save con	nfigurations

• The function of CAN1 and OBD can be enabled at the same time.

6. Configuration of the Cloud Platform

The configuration of the cloud platform is the North-direction interface and protocol configuration option of the vehicle tracker. The VT310 can only be connected to one cloud platform at a time. The configuration of the platform takes effect only after the device is restarted. Click "Platform" to enter the configuration page. Click "Modify" to enter the configuration page. As is shown below.

				eway Configuration Tool	
itatus	Function Status	Connection Status	Platform Type	Connected Domain	Action
system settings	Enabled	Disconnect	Smartfleet	che inhandiot com	Modify
Cellular					
OBD settings					
Cloud Platform					
ecurity					
faintenance					
lelp					
文					

6.1 SmartFleet Platform

The SmartFleet platform is a SaaS platform for the Internet of Vehicles market launched by InHand Networks. It mainly includes vehicle profile, alarms, driving behavior monitoring, statistical analysis of driving information, electronic fence and other functions. Through the visual user interface and simple operation, you can manage and monitor your hardware devices such as the InVehicle Gateway with speed and ease. Deployment in the cloud allows you to focus on your core business. Login address: https://che.inhandiot.com. For more information about the platform, please visit https://www.inhandnetworks.com and chat with us.

Cloud Platform >> Platform Type: SmartFleet, Cloud Platform >> Enable Cloud Platform >> Domain name: smartfleet.cloud Cloud Platform >> Account (Enter the platform's registered account) Cloud Platform >> License Plate Number Click "Show Advanced Options" to show hidden configuration items. Configure the LBS reporting interval, traffic reporting interval, and heartbeat reporting interval as needed. The reporting interval is measured in seconds, as is shown below. Click "Save configuration" and restart the device. As is shown below.

	Function Status	Connection Status	Platform Type	Connected Domain	Action
System Settings	Enabled	Connected	Smartfleet	smartfleet cloud	Modify
Cellular					
OBD Settings					
Cloud Platform					
Security					
SC .					
1-Wire					
Maintenance					
Help					
中文					

On the Cloud Platfrom homepage, view the link status of the platform. The link status is "linked". As is shown below.

Log in the platform and choose Gateways >> Gateway List. You can see if the vehicle tracker is online. As is shown below.

All	Online	Off	ine						
Name	V Plate Nun	nteer	Custo	mer name:	All Customers	V Search R	leset		Export
	Name	Signal	Battery Volt	age SN		IMSI	Current Version	Operation	
	• /IIA3L731	liter		RW91	11201701181	Analog data	3731951254	2 0	
	 JHZ9022 	anti		VF310	2102000207	460010100114835	VT3_V1.0.26	2	
2 records	s in total; page 1 o	f 1						< 1 > 10/	page ∨

6.2 Wialon Platform

Wialon has more than 18 years of best practice in software engineering in the area of GPS vehicle tracking and a team of talented specialists committed to the common goal. The community is united by continuous advancement of the proprietary products and five offices around the world - the headquarters and development center in Minsk and sales offices in Moscow, Boston, Dubai and Buenos Aires. Nowadays solutions by Gurtam take up about 36% of the CIS commercial carrier market and are actively expanding to Europe, the Middle East, the USA, South America, Africa and Australia, with even New Zealand market tapped. For more information, visit <u>https://gurtam.com/en/wialon</u>. To test the Wialon platform, you can contact manager Sun sunzd@inhand.com.cn for more support. Cloud Platform >> Platform Type: Wialon, Cloud Platform >> Enable Cloud Platform >> Domain name: nlgpsgsm.rog Cloud Platform >> Port : 21000 Cloud Platform >> Account (Enter the platform's registered account) Cloud Platform >> License Plate Number

To adjust the reporting frequency, click "Show Advanced Options" to show hidden configuration items. Set the reporting interval reporting interval in seconds. As is shown in the following.

		Vehicle Tracking Gateway Con	figuration Tool
Status			
System Settings	Platform Type	Wialon	•
Cellular	Enabled		
OBD Settings	Domain	nl.gpsgsm.org	
Cloud Platform			
Security	Port	21000	
1-Wite	Show Advanced Option		
Maintenance			
Help			
中文			

If you have obtained an independent domain name provided by Wialon, enter the custom domain name and port number. As is shown below.

		Vehicle Tracking Gateway Conf	figuration Tool
Status			
System Settings	Platform Type	Wialon	
Cellular	Enabled	\checkmark	
OBD Settings	Domain	nl.gpsgsm.org	
Cloud Platform			
Security	Port	21000	
1-Wite	Show Advanced Option		
Maintenance	Upload Interval	3	
Help			
中文			

6.2.1 Configuration on Wialon Platform

Platform website: https://hosting.wialon.com

New devices:

🚺 ເມໂລໂວດ 🛛 kt Databased 🕥 Monitoring 🎟 Trace	a 🗐 14	tist a y	11	dia March			i 🔀 Natifications 🛕 User, 💭 Units
Next Preste from WLP Q. Semith				Vestern The Novel-Western Potsages	een Augter Boa	GREENLAND	
	+	rg.	x	H.S.	They be		
3PBarstc_001	٩	-	×	16-11-0	1 3 8	1 77	and the second
20201116	٩		×		Davis Small	MONTH AILMATE	Start Same
A-show	4	- 16	×	- Al	1. 1. 1	ICELAND	
Evan_device_1	4	5	×	- Andrew	bows smort		FINLAND
FQ58	4	4	×	Halban Bay		A.	NORWAY
FQ58-LIYB-1	4	ų.	×	Financia - Eng	6.34		Marsh Sea
FQ58-v1.0.11-01	٩	1	×		Lobisono	n. 24a.	munth Sea
FS31-Evan-test	4	14	×		1	IRE	LAND

The device configuration information is as follows:

- Name: Custom
- Device Type: Select "Wialon Combine"
- Special ID: Enter the device-specific serial number. View the serial number of the device or the serial number on the status page of the configuration tool. The information shown in the following figure is for example only.

General	Access I	con Ac	lvanced	Sensors	Custom Fi	elds Uni	t Groups	Commands	Eco Driving	
Profile T	rip Detector	Service	Intervals							
• •	Now the "f	Monitoring" ta init properties	s in the libra ab and to di s.	ary are the same	oes in reports	, specify the v		nits by vehicle type n the "Profile" tab		
√ame: * Jnit type:	us-FS31-Mi	n (~							
Device type: * Server address:	Wialon Com	STOA DA	* (P)	Wialon Combin	ie WiaTag	InHand VT3	10			
Jnique ID: Phone number:	VF3102104	000								
Password: Creator:	inhand free		~							
Account:										

6.2.2 View Data Uploaded by Devices

- ① Select "Message"
- (2) Select the name of the target device to be viewed
- (3) Select the time range of interest
- (4) Select the data type. Currently the colelcted I/O data is viewed through

Raw Data

(5) Click the "Execute" button to view the information of the target device at

the position of (6), as is shown below.

Unit: Today	testi -	1					
Interval:	Specified interval	3					Ô
From:	2020 April 02 00:00					VT310	F531_2¥2
70	2020 April 02 23:59			A			+ +
Message lipe	Data messages •	1	410	VT310_F\$31_93			
Show parameters as:	Tavi data -	(4)			100		
Statistics	Resalt		SpanStructStap contributo				N 30° 35.2646' ; E 104° 03.1300
Total messages	2		+ Tene	Parameters	Media	0	
Total time: Distance	0.00 km	1	2020-04-02 11 00 02	param2=0, param3=3346, param4=0, param1=4 92687515694e-38,	NO={		6
Average speed		2	2020-04-02 10:59:51	param2=0, param3=3352, param4=0, param1=4.92687515694e-38,	VO=C		
Maximum speed	-						J.

Note: The information display of the target device can be selected by clicking the configuration method, as is shown below.

2020-04-02 11:00:02 param2=0, param3=3346, param4=0, param1=4.92687515694e-38, VO=C Image: Comparison of Comp		* Time	Parameters	Media	
2020-04-02 10:59:51 param2=0, param3=3352, param4=0, param1=4.92687515694e-38, I/O=C		2020-04-02 11:00:02	param2=0, param3=3346, param4=0, param1=4.92687515694e-38, I/O=0	1	
	2	2020-04-02 10:59:51	param2=0, param3=3352, param4=0, param1=4.92687515694e-38, I/O=0		

6.3 Azure IoT Hub

Azure IoT builds IoT applications that offer highly secure and reliable two-way communication between IoT applications and their managed devices. Azure IoT Center provides the back end of cloud hosting solutions, which can

connect to almost any device. The solution is extended from the cloud to the edge through authentication, built-in device management, and extended configuration of each device. For more information, visit https://azure.microsoft.com/zh-cn/services/iot-hub

Cloud Platform >> Platform Type: Azure IoT

Cloud Platform >> Enable

Cloud Platform >> Connect String

The Connect String is created from Microsoft IoT platform. See in the next section.

To see invalid data, click "Show Advanced Options" to view hidden configuration items. Tick "Show Invalid Data", as is shown below.

		Vehicle Tracking Gateway Configuration Tool
Status	Platform Type	Azure IoT
System Settings		
Cellular	Enabled	
OBD Settings	Connect String	HostName-VT310.azure-devices.cn;DeviceId-;SharedAccessK
Cloud Platform	Show Advanced Option	
Security	Publish Invalid Data	
l-Wire	i dolish invalo Dete	
Maintenance		
Help		
中文		
Disconnect		Back Read again Save configurations

6.3.1 Configure Azure IoT Platform

 Before configuring the Connect String, log in the Azure IoT platform to create a device. In the left-side navigation pane of the IoT Center, choose "IoT devices", and then select "New". As is shown below.

iot-hub-contoso-one -	IOI devices						1
© Search (Ctrt+/)	≪ + New Ö	Refresh 👔 Delete					
X Overview Activity log	~ View, create	delete, and update devices in you	r Ioł Hub.				
Access control (IAM)		Field		Operator	Value		
P Tags	+ ×	select or enter a property non	e 🔍	- ~	specify constraint value]].
Events	+ Add a nev	w clause					
ettings	Query devic	ters -				Switch to query	editor
Shared access policies							
Pricing and scale	DEVICE	EID STATUS	LAST	CTIVITY TIME (UTO)	LAST STATUS UPDATE (UTC)	AUTHENTICATION T	CLOUD
- IP Fiiter	No re:	sults					
Certificates							
Built-in endpoints							
Manual failover (preview)							
Properties							
Locks							
Export template							
cplorers							
Query explorer							
I IoT devices							

 On the "Create a device" page, provide the name of the new device, such as myDeviceId, and then select "Save". This creates a device identifier for IoT Center. As is shown below.

Home > All resources > iot-hub-contoso-one - IoT devices > Create a device		
Create a device		×
Find Certified for Azure IoT devices in the Device Catalog	Z	
* Device ID 👔		٦
myDeviceId	~	
Authentication type 🕦		
Symmetric key X.509 Self-Signed X.509 CA Signed		
* Primary key 🕤		
Enter your primary key		
* Secondary key 🖲		
Enter your secondary key		
Auto-generate keys 🛛 Connect this device to an IoT hub 🚱 Enable Disable		
Parent device 👩		
No parent device Set a parent device		
Save		

 After creating the device, open the device in the "IoT devices" pane. Copy the "Primary Connection String" and later paste to the "Connection String" of the configuration tool ". As is shown below.

nyDeviceId t-hub-contest-one			\$
🗟 lave 🔛 Message to Device 💉	Direct Method 🕂 Add Wodule Identity 🔳 Device Twin 🔍 Manage keys 🗸 🕐 Refresh		
Device ID	myDexiceed		D
Primary Key 💿	H2Avw1PN3suMBkaiQU1UsEIIIB3j0*	9	D
Securidary Key 🕚	G7615rzebeyWFzerfilgmad55KGVa4I=	.9	Đ
Primary Connection String 🌘	HostMame+iol-hub-contoso-one.azure-devices.net, Devceld+myDevceld; SharedAccessKey=QdSimBiTcptUCelWYOVSeRKOV2ZQFSJpbmy/oVYMSdF	9	D
Secondary Connection String 🍵	HostHame=iol-hub-contoso-one.azure-devices.net.Devceld=myDevceld;SharedAccessKey=g32jpiKovifEXbbqKYtyJdsF182g2IngzGZspcli2rcp=	9	D
Enable connection to for Hub.	Enable Disable Ino parent device Ø		
Module Identities Configuration	ns.		
MODULE ID	CONNECTION STATE CONNECTION STATE LAST UPDATED (U., LAST ACTIVITY TIME (UTC)		

6.4 AWS IoT Platform

With the AWS IoT Core, you can connect your IoT devices to the AWS cloud without configuring or managing the server. The AWS IoT Core supports billions of devices and trillions of messages, and can process those messages before routing them to AWS terminal nodes and other devices with security and reliability. With the AWS IoT Core, your applications can track all devices and communicate with them anytime, even if those devices are not connected. Build your IoT applications with AWS services, so that you can collect, process and analyze data generated by connected devices and take action without managing any infrastructure. For more information, please visit https://aws.amazon.com/iot-core/.

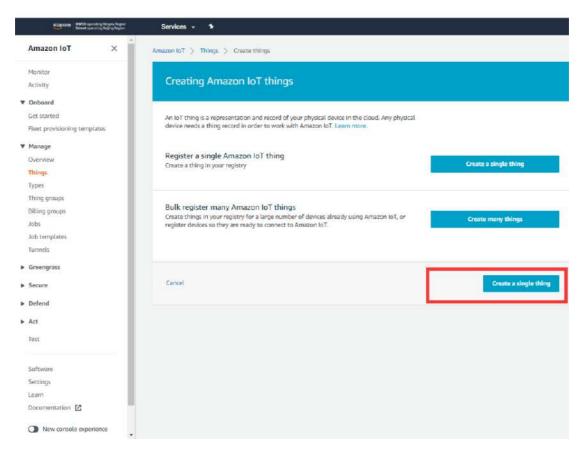
6.4.1 Configure AWS IoT Platform

Method 1: Creat A Thing for link

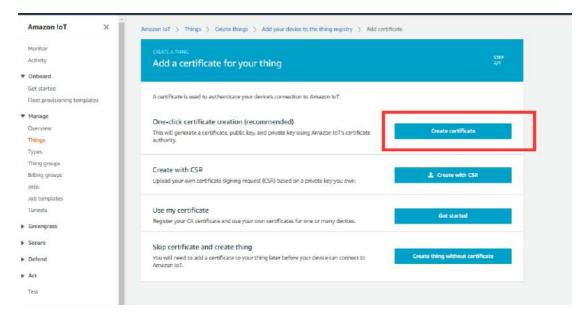
 Go to the Amazon IoT console >> Things page, and click "Create", as is shown below.

Amazon IoT 🛛 🗶	Armarlet y Things		
Monitor	Things		Contro
Onboard Set storied	Search Strap		
leert providening temploies	C Rane	Турн	
Mensige	E Hez.W510(10)00010	O 30310	
Things	C mm	1947 124	
Yayem Yuling gamaaa	O tendet	NEL TYPE	
attan indexe	[] had stade free	series	
intes Internetione	() met.fontier	- Artaina	
Tanneila	The statement of the st	432.00	
intergense	C Net MP310710700000	V1310	
ierum Defeed	C VT310W310210200316#	vtto	
ia .		VELID	
est	U VIIILEET, PROMION	UTELO	
Coltanaria	i initi 11,000	ING TITLE	140
ante qu	() #s	INC TYPE	
uam Instrumtetion 🖸	CT VTSIU MESICZIOOSOBIHE	97510	
New consile operations		NG TIVE	

Amazon IoT >> Things >> Create a single thing



Amazon IoT >> Things >> Create a single thing >> Add your device to the thing registry >> Add certificate On this page, create a certificate for the thing just created, as is shown below.



2. Download certificate file

- Download certificate >> A certificate for the things >> Download the file format is as follows: ***.cert.pem;
- Download private >> A private key >> Download. The file format is:
 ***.private.key;
- AWS CA files have been download in the vehicle tracker, so you do not need to Download CA files. If you need to update, click "A root CA for Amazon IoT Download";
- Click "Activate" to activate the certificate of the thing;
- Click the "Attache a policy", enter additional policy page. As shown in the following illustration.

Amazon loT ×	Success Successfully created thing.
Monitor	© Success
Activity	Successfully generated certificate. Please download certificate files.
▼ Onboard	
Get started	
Fleet provisioning templates	Certificate created!
♥ Manage	
Overview	
Things	
Types	Download these files and save them in a safe place. Certificates can be retrieved at any time, but the private and public keys cannot be retrieved after you close this page.
Thing groups	
Billing groups	In order to connect a device, you need to download the following:
Jobs	A certificate for this thing da3668b655.cert.pem Download
Job templates	
Tunnels	A public key da3668b653.public.key Download
Greengrass	A private key da3668b653.private.key Download
Secure	You also need to download a root CA for Amazon IoT:
Defend	A root CA for Amazon IoT Download
▶ Act	Activate
Test	
Software	
Settings	Cancel Done Attach a policy
Learn	

• On the "Attach a policy" page, config additional policy for the certificate and click "Register Thing" to register the item, as is shown below.

tanitar ctivity	CREATE & THOME Add a policy for your thing	5770 3/3
Inboard		
et started		
leet provisioning templates	Select a policy to attach to this cartificate:	
tanagé	Q. Search polides	
Iverview	VISIO_POLICY	Hide
hings		Hide +
ypes	č.	
hing groups	"Version": "2012-10-17", "Statement": [
itting groups		
2026	"Effect": "Allow", "Action": "ist:#",	
ob templates	"Resource": "*"	
Lannots.	"Effect": "Allow",	
ireengrass	"Action": ["Lot: Publish",	
	"Lot: Horeive"	
ecura	I/ "Resource": "**	
iefend	2	
et	"Effect": "Allow", "Action": "int:Subscribe",	
<i>c</i> τ	"Recource": ""	
est	1	
	J VG710sample	View
oftware		THEW -
ettings		
pam		
ocumentation 🔀	1 policy selected	Register Thing
	ON STREET	

- 3. Use the configuration tool to import the certificate file to the tracker
- Security >> Import digital certificate >> Select a certificate (select the downloaded digital certificate ***.cert.pem in the displayed dialog box); click "Import certificate"
- Security>> Import private key certificate >> Select a file (select the downloaded digital certificate ***. private.key in the dialog box that appears); click "Import file";
- As the AWS CA files have been built into the vehicle tracker, there is no need to download them. If you need to update them, go to Security >> Import CA certificate >> Select a file (select the downloaded digital certificate ***. private.key in the dialog box that appears); click import certificate, as is shown below.

System Settings	Import certificate			
Cellular	Import DC	Select file	Select certificate	Import certificate
OBD Settings	Import private key	Select file	Select file	Import file
Cloud Platform	Import CA	Select file	Select certificate	Import certificate
Maintenance Help 中文				

4. Enable AWS Platform

Cloud Platform >> Platform Type: AWS IoT Cloud Platform >> Enable Cloud Platform >> Domain name Cloud Platform >> Port: 8883

		Vehicle Tracking Gateway Confi	guration Tool	
Status				
System Settings	Platform Type	AWS lot	•	
Cettular	Enabled	\checkmark		
OBD Settings	Domain	1		
Cloud Platform	Port	8883		
Security 1-Wire	Enable Device Provision			
Maintenance	Show Advanced Option			
Help				
中文				
Disconnect			Back Read again Save configur	10

"Cloud Platform >> Domain name" AWS IoT >> Things >> "Select the created things" >> Interact Copy this domain name paste to "Cloud Platform >> Domain name"

Reet provisioning templates Details This thing already appears to be connected. Manage Security: Thing groups HTTPS Rilling groups Update your Thing Shadow using this Rest API Endpoint. Learn more Shadows Shadows Stoctmny/Sen7e.sts.lot.cn-north-1.amszonaws.com.cn Intersect Activity: MQTT Jobs Use topics to erable applications and things to get, update, or delate the state information for a beforder metrics Secure Defend	Actions -
Onboard NO 1992 Get started Details Filest provisioning templates Details Manage Secontry Thing groups HTTPS Billing groups Billing Groups Billing groups Statewat Jobs Statewat Jobs Update your Thing Shedow using this Rest API Endpoint. Learn more Shadowa Statewat Shadowa Statewat Jobs Intersect Jobs Update your Thing the dow using this Rest API Endpoint. Learn more Shadowa Statewat Jobs Update your Thing Shedow using this Rest API Endpoint. Learn more Shadowa Statewat Jobs Update your Thing Shedow using this Rest API Endpoint. Learn more Shadowa Statewat Jobs Update your Thing Shedow using this Rest API Endpoint. Learn more Jobs Update your Thing Shedow using this Rest API Endpoint. Learn more Jobs Update your Thing Shedow using this to get, update, or delate the state information for a Jobs Update your more Defend Defender metrics	
Get started Details This thing already appears to be connected. Manage Secontly. Overview This thing already appears to be connected. Secontly. This groups Mining groups HTTPS Billing groups Billing Groups Jobs Secontly. Jobs Activity Violations Lasen more Defend Defend	
Feet provisioning templates Details This thing already appears to be connected. Manage Secontly. Overview Thing groups. HTTPS Thing groups Billing Groups. Update your Thing Shadow using this Rest API Endpoint. Learn more Shadows Station of the state information for a biological to get, update, or delete the state information for a biological to get, update, or delete the state information for a biological to get, update, or delete the state information for a biological to get.	Connect a device
Overview Thing groups Thing groups Thing groups Billing groups Billing Groups Billing groups Shadows Interact Stotmy/Sectors	
Overview Thing groups HTTPS Rings Alling groups Alling groups Interset Stadows atcolorny7sein7e.ats.iot.coinnorth-1.amazonaus.com.coin Interset Activity. MQTT Jobs Use topics to enable applications and things to get, update, or delete the state information for a statement Greengrass Defender meetros	
Things Billing Groups Thing groups Shadows Shadows Stoctnny7sen7e_ats.iot.cn-north-1.asszonsws.com.cn Interact Activity Job templates Activity Junes Update your Thing Shadow using this Rest API Endpoint. Learn more Shadows Stoctnny7sen7e_ats.iot.cn-north-1.asszonsws.com.cn Interact Activity Job templates Activity Junes Update your Thing Shadow using this Rest API Endpoint. Learn more Stoct MQTT Job templates Job Use topics to enable applications and things to get, update, or delete the state information for a Update or Defender metrics Secure Defend	
Types Update your thing Shedow using this kest API Exposit. Learn more Thing groups shadows Billing groups atcottnny7sen7e.sts.itot.cn-north-1.searonsws.com.cn Jobs Activity Job templates Jobs Tunnels Violators Violators Learn more Defend Act.	
Intra groups Stootnny7sen7e.sts.iot.cn-north-1.amazonavs.com.cn Billing groups Activity Jobs Activity Job templates Jobs Use topics to enable applications and things to get, update, or delete the state information for a Violations Greengrass Defend Act Activity	
Billing groups Lobs Activity MQTT Lobs Use topics to enable applications and things to get, update, or delete the state information for a Violations Defender metrics Activity	
Iob templates Jobs Jumels Jobs Tunnels Use topics to enable applications and things to get, update, or delate the state information for a Violetions Greengrass Defender metrics Defend Act	
Job templates Jobs Jobs Use topics to enable applications and things to get, update, or delete the state information for a Violations Learn more Defender metrics Act.	
Turnels Use topics to enable applications and things to get, update, or delete the state information for a Violations Learn more Defend Act	
Greengrass Learn more Defend Secure	Thing (Thing Shadow)
Defend	
Act	
Test	
Software	
Settings	

Save the configuration and restart the device. On the Cloud Plateform Cloud Platform page, check the connection status:

			Vehicle Track	ing Gateway Configuration Tool	
tatus	Function Status	Connection Status	Platform Type	Connected Domain	Action
ystem settings	Enabled	Connected	AWS IoT	al cotnny7sen7e.ats.iot.cn-north-1.amazonaws.com.cn	Modif
eilular					
OBD settings					
Noud Platform					
ecurity					
laintenance					
elp					
<u>ب</u> ک					
Disconnect				Refresh Co	onfiguratio

By default, invalid data is not reported. To report invalid data, tick "Report invalid data" in the advanced options. After that, the reported data value that does not exist is NULL, as is shown below.

Method 2: Create a provisioning template connection for AWS

 Create a prefabricated templet: Amazon IoT >> Fleet provisioning templates >> Create, as is shown below.

Amazon InT 3 Fleet provincering templates		
Fleet provisioning templates		Onite
Search templates		
Raze	Status	
	Enabled	3.000
	2,000	
U ATTIRTZ	mated	
	Fleet provisioning templates Send templates To name	Fleet provisioning templates Sand terestates Image Rance Sands Image Sands Image Sands Image Sands

Creat Certificate: Amazon IoT >> Certificates

Amazon IoT ×	Amezon 107 D Certificates		
Monitor Activity	Certificates		Create
Onboard	Search certification Q		
iet started Teer provisioning unreplaces	🖸 Name	Status	
faruige Iversiaw	C IIIa Magaoo Still 700 TO Anna Markov 302754 e Alfred 2000 44229 Alfred 101 104 501 anna 50	Inactive	***
hings	Dar185e47147a6w71942fa8803ee23065790740e706176455046220ef7222eca	Active	***
ypes bing groups	Et200720162179858360495532205x62753245924692346046046156258846554546445655	Activo	
illing graups	v2836cfac5f8c356745ac/5f8ac744c56874fbtbdbstc2f7ct/f5a4c26fac155a	Inactive	***
ene zatelgmot de	Cac?o42440842m355753C031ce8195587532633ce8195587526a3cadox29448cedus12c4eeft87	Inactive	***
umets	EDERSA40764562146666153310566660555153441327177465869065962560259	Activa	120
ireesigrass acum	atce0375c7e41506e74eseec60oe8b00534a2bo434635743011131025304046	Active	***
ertificates	74471a2120429362888444419642008826679054695608261906158481636415	Active	022
olicies As	N 1000005726131575007709000061500720064688.24947161180057266334805	Adha	1444
lete Allanan Authorizans	Li 48229046026416956211006771606/19745/6603841044956661148866/64002	Active	***
hefend	Bab4819721211e8b76517356e5b5b87276d406bd8ab14e019e9fs5110892450e4	Inactive	C 444
ict	and an	Inactive	

Amazon IoT >> Things >> Create a single things >> Add your device to the thing registry >> Add certificate

On this page, create a certificate for the thing just created, as is shown below.

Monitor	A standard Utward Science	
Activity	Create a certificate	
Onboard		
Get started Fleet provisioning templates	A certificate is used to authenticate your device's connection to Amazon IoT.	
Manage	One-click certificate creation (recommended)	
Overview	This will generate a certificate, public key, and private key using Amazon JoT's certificate authority.	Create certificate
Туриз	A CONTRACT OF	
Thing groups Billing groups	Create with CSR Upload your own certificate signing request (CSR) based on a private key you own.	1 Create with CSR
obs ob templates	Use my certificate	
formels Sreengrass	Use my certoincate Register your CA certificate and use your own certificates for one or many devices.	Get started
cure		
ertificates		
plicies		
As		
cle Aliases		
uthorizers		
efend		
Act		

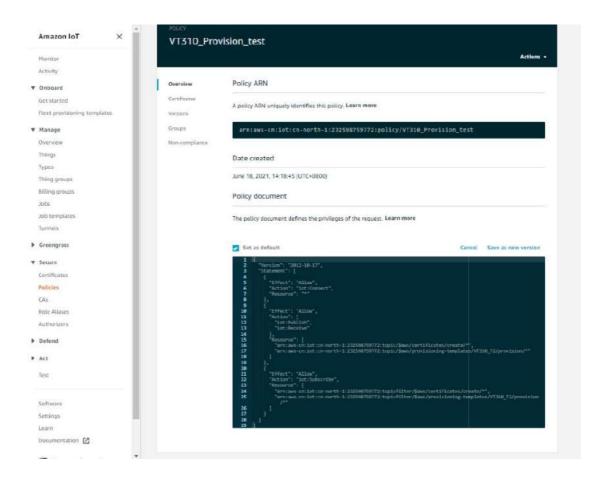
- 2. Download a certificate file
- Download a public key file >> A certificate for the things >> Download. The file format is ***.cert.pem;
- Download the private key file >> A private key >> Download. The file format is
 ***.private.key;
- As the AWS CA files have been built into the tracker, there is no need to download them. If you need to update, click"A root CA for Amazon IoT Download";
- Click Activate to activate the certificate;
- Click the "Attach a policy", enter additional policy page, as is shown below.

× Tol nosemA	© Success Successfully (provided conflicture Please download conflicture Hers	
Monitor		
Activity		
Onbaand	Certificate created!	
Getstorted		
Fleet provisioning templates		
r Manage	Develated these files and save them in a safe place. Cartificates can be retrieved at any time, but the private and public keys samet be retrieved	
Overview	after you close this page	
Things		
Types	In order to connect a device, you need to download the following:	
Thing groups	A cost#case for this thing / 7067568292/ert.peen Denvinie	
Billing groups	A public key 19b76062012.0.ctic.key Desminant	
Jobs		
Jub templates	A private key Yob7568292 private key Download	
Turinets		
Greengrans	Yee also need to download a root CA for Amazan b01: A root CA for Amazon IoTDewnload	
f Secure		
Cortificates	Activate	
Policies		
CAs		
Role Aliases		
Authorizers	Carral Done Arrachia policy	
Defend		
Act		

• On the previous window, click "Activate" to enter the certificate list. Click "Done" and complete certification.

Add authorization to certificate	
Matty Control of Contr	
ctailty Voccare attaching a policy to the following certificate:	
1002ml /01/76/62/924e24/97504/7552:2160x/95192/060915147716606(ce9)454c1394e	
ctoried Select a policy to attack to this certificate:	
er, pre-scienting transpirates	
0. Search publies	
erviewsubgg_policyview *	
ings pub_gg-policy View	
ps	
ad horts	
Ing groups 🛃 VT310_Provision_test.	
8	
on completes "fiffact", "Allow"; unut: "Active", "latiformest",	
"Resource") ""	
reenynes (
"Effect": "Allow", "Action": [
"Bet Fulliss", "Set Receive"	
let	
Create new policy	
Alass	
nines	
fend TypSkyselected Dane	
i presi acceso	

 On the previous window, click "Attach a policy" to enter the Amazon IoT >> Policy list to add a policy, as is shown below.



- 3. Use the configuration tool to import the certificate file to the vehicle tracker
- Security >> Import digital certificate >> Select a certificate (select the downloaded digital certificate ***.cert.pem in the displayed dialog box), click "Import certificate"
- Security >> Import private key certificate >> Select a file (select the downloaded digital certificate \\. private.key in the dialog box that appears); click "Import file";
- As the tracker already has a built-in AWS CA file, the CA file is not required. If you need to update the CA file, go to Security >> Import CA certificate >> Select a file (select the downloaded digital certificate ***.cert in the pop-up dialog box), click "Import certificate";

	Import certificate			
System Settings	import ceruncato			
Cellular	Import DC	Select file	Select certificate	Import certificate
OBD Settings	Import private key	Select file	Select file	Import file
Cloud Platform	Import CA	Select file	Select certificate	Import certificate
Maintenance Help 中文				
Help				

4. Enable AWS

Cloud Platform >> Platform Type: AWS IoT Cloud Platform >> Enable Cloud Platform >> Domain name Cloud Platform >> Port : 8883

		Vehicle Tracking Gateway Co	onfiguration Tool
Status			
System Settings	Platform Type	AWS lot	*
Cellular	Enabled	\checkmark	
OBD Settings	Domain		
Cloud Platform	Port	8883	
Security	Enable Device Provision		
Maintenance	Show Advanced Option		
Help	Publish Invalid Data	\checkmark	
中文			
Disconnect			Back Read again Save configuration

▲ If you create a preset template on AWS, you need to enable device preset in the configuration tool. Tick ✓ to enable it, and enter the preset template name. The template name can be found in AWS IoT >><u>Fleet provisioning</u>_ templates.

Copy the address in the AWS IoT >> Things >> "Select created things">> Interact option. Enter the domain name on the AWS IoT page.

Monitor	THENE		
Activity			
Onboard	NO TYPE		Actions -
Get started			
Fleet provisioning templates	Details	This thing already appears to be connected.	Connect a device
Manage	Security		
Overview	Thing groups	HTTPS	
Things			
Types	Billing Gmups	Update your Thing Shadow using this Rest API Endpoint. Learn more	
Thing groups	Shadows	sicotnny7sen7e.ats.iot.cn-north-1.amszonaws.com.cn	
Billing groups	Interact		
Jobs	Activity	MQTT	
Job templates	Jobs	HQI	
Tunnels	Violations	Use topics to enable applications and things to get, update, or delete the state information fi	ar a Thing (Thing Shadow)
Greengrass	Defender metrics	Learn more	
Secure			
Defend			
Act			
Test			
Software			
Settings			

Save the configuration and restart the device. On the Cloud Platform Cloud Platform page, check the connection status:

			Vehicle Track	ing Gateway Configuration Tool	- ×
Status	Function Status	Connection Status	Platform Type	Connected Domain	Action
System settings	Enabled	Connected	AWS IoT	al cotnny7sen7e.ats.iot.cn-north-1.amazonaws.com.cn	Modify
Cellular					
OBD settings					
Cloud Platform					
Security					
Maintenance					
Help					
中文					
Disconnect				Refresh Co	onfigurations

6.4.2 Subscription and Publishing of AWS

1. Subscribe to messages reported and published by VT310

Amazon IoT >> Test

Amazon loT 🛛 🛪	Arazze tal. 3 tes.		
Haritza Activity	MQTT client 🚥		Consected as interested -102254-00022718-0
 Ordened Satisserad Forturations 	Educations Educations		
Moninge Ownshow Damp	Pathiki te ruga	Interior IN Devices problem MSO(T) rescipier on segme . Securation Ris date to a date that a state and restrict their messages. Security for the second security of the second	(Anno Anno Anno Anno Anno Anno Anno Anno
Edu. Falta Aliman Austanaza • Lethind • Aut. kea Sefferare Sattinga Sattinga		Palace Society essai are a musage to accessive if a give of a Specify event is a palace of a give and a give any film of a second of the second of the secon	('Ministery')

Amazon IoT >> Test >> enter the published topic in the Subscription topic text box, as is shown below.

For example: v1/VT310 SN/motion/info

	NOTICE TO A CONTRACTOR OF A CO		
ing .	MQTT client 🛶		Connected as internatio 162644415
neri Neritat	Salariptan		
provisioning http://dat	Surface the to a topic	Labour Han	
aar mene p p p p p p p p p mene p p p mene p p mene p p mene p p mene p p mene p p mene p p mene mene	Palatiti Ta u Tagar	Development Mich Transpage on taken. The unit value (a bat to batch the sales of a sales	Shadety ligh
engrass eng Trocess lang Allansis		Constraint enable	
wars.		Publish Specific a trace and a message to publish with a QurS while	
		landy a true to animite to, e.g. replace/1	
ad			
w.			
-		$\sum_{i=1}^{N}$ writing r_i , with rest and all constitutions r_i	
		(a) Another a set of another and a set of another and a set of	

By default, the VT310 reports messages from the retention groups of GNSS, Sysinfo, Motion, Cellular1, IO, and OBD. You only need to subscribe to topics to receive messages, as is shown below.

Amazon leT X	Amastrid, 2. Tex.		
Posito	MQTT client		Connected as internave-1625648402778-0
Colourd Out sur nut	Externation .	v1/v1313:102300178/methed/adv	Opert Clear Passe
int contents testion	Subarrike to a taxes	Publick	
Ran age	Public Is a taple	Sacoty is train and a memory of a particle with a QaS of 0	
terge	w1/\171122102900171.)mol	+{\/#110210230311E}/medax/fmfo	Publish to topic
pano Histop operation Histop generation Histop generation Histop generation Histophysical Science (Science Science Sci		¹ / ₂ (second), (second second	
resdi WUTUESS			
et al la		v1/VF3102102000128/motion/info Arg 07, 2021, 13 66 33 6.07, 5460	Separt Web
editutea dilan Ni di Abass di Abass		"Witten U" METMON", "Witten U" 4.01704 "Witten U" 4.01704 "Witten U" 4.01704 "Witten U" 4.01704 "Witten U" 4.01	
fort			
e,			
6.1			
DAILY .			
10			
n annachán 🔁			

For more information, see API documentation.

```
《FlexAPI_over_MQTT_Reference_for_3rd_party_platform_VT310.pdf》
```

6.5 Aliyun IoT

The Alibaba Cloud Enterprise IoT platform provides fully-hosted instance services. It allows you to easily access and manage devices without building IoT infrastructure by yourself. It features low costs, high reliability, high performance, and easy operation and maintenance. With powerful data processing capabilities, it can better analyze and visualize device data. Realtime security threat detection ensures that each instance is secure and reliable. It is the first choice for each enterprise device to migrate to the cloud. For more information, visit the Alibaba Cloud product page. <u>https://www.aliyun.com/product/iot</u>.

Method 1: One machine and one key

For more information: https://help.aliyun.com/document_detail/74006.html

 Go to the Alibaba Cloud Console IoT Platfrom >> Device >> Devices >> Device Details. Create a Device and view the Device Secret, as is shown below.

Public Instance	In' Hatform / Devices /	Devices / Deale Details				
kes o	← mqtt_ter	np one				
Products		T約式呈現式登展 View ANSCAND Capy		Devezitoret	E.W.	
Devices	Device Information		Amage Files Device Log	Orline Debug Groups Task		
Geoupe	Device Information					
CA Certificate	Product Name	WOTTINEZ講座記录体	ProductSey	a 10 WISCARD Com	Regisio	China Sherighali
4 V	Node Type	Devise	Decemberse	mitt_semp Copy	Authintication Mode	Deusse Secret
elenance 🔍	No. 0	int'	IF Address	1784225232	formation (section)	(a)
ource Allocation ∽ Analytics ⊴	Created Ar	/st 5, 2021, 15:09:19	Desivited At	Jap 5, 2021, 154597.40	Last Online	lat 11, 2021, 1803/49-419
Visual	Governtification	Citine	Raab tiers Deby (0)	Test	Device local log reporting	Enabled 🌑
umentation and Tools	More Device Informati	en				
	SDK Language	5(huse	Valance	1,27	Musicle Vanafacturer	
	Modula Information					

The Device Certificate of the replication Device includes three parameters: Product Key, Device Name, and Device Secret, as is shown below.

😑 C-D Alibaba Cloud	D VARIABLES CR	na (Banghà) -				Approx Rose RDP	Emergene Support App E
+ Public instance Devices ~	w [™] Patrice / Deces ← mqtt_ter	/ Devise / Center Prints mp Office					
Products		ANGLE CON		Develo	ent vite		
Devices	Desice Wormation	Tourcles TSLDWA	Device Shadow Manage R	Tes Dense Log Online Debug Groups	a Tank		
Groups	Device Information						
CA Centificate	Probert Stores ()	MUTRESER	Device Certificate		×	(Bypine):	Olym (Diarogow)
fluites	Paude Tajer	Devices				Jamundcation Mode	Device Secret
Malatanance 🗢	Allan, dir	-	DeviceNarie:	attisticatiq Copy		Press, Sense	
Link Analytics II	Creates Pr	Ax 5, 0821, 15 RE118	Destadantet	8787.00000930.070705414038381765 Com		101918	au 15,207,168148,470
Elinic Visual 🖓	CorpetBable	Office	Certificate installati			Course and the reporting	Takini 🌑
Documentation and Tools	More Device Informat	ion		na moues nam-ontificate par device and instan-ontificate per picto	all mides		
	ADR Language	Eleman			Gass	Middle Mendamyre	
	Matuk Montelior						
	Tag Information Dence Tag his results from	∠ t≈ 4					

2. Config Aliyun IoT

Cloud Platform >> Platform Type: Aliyun IoT Cloud Platform >> Enable Cloud Platform >> Device Name: Cloud Platform >> Product Key Cloud Platform >> Authentication Mode: Unique Certificate Per Device

Cloud Platform >> Device Secert

Tick vertificate Per Certification Mode: Unique Certificate Per Device/Unique Certificate Per Model

The three parameters from Alibaba Cloud ProductKey, DeviceName, and DeviceSecret. Enter the corresponding parameters in the configuration tool. In the upper-left corner of the IoT platform console, view the region where your service is located. For more information about the Region ID values, see Region and zone.

		Vehicle Tracking Gateway Configuration Tool	11 -
Status			
System Settings	Platform Type	Aliyun Iot 👻	
Cellular	Enabled		
OBD Settings	Device Name		
Cloud Platform	Region ID		
Security 1-Wire	Product Key		
Maintenance	Authentication Mode	Unique Certificate Per Device	
Help			
中文	Device Secret		
	Show Advanced Option		
	Publish Invalid Data	\checkmark	
Disconnect		Back Read again Save	e configurations

6.6 Configuration of MQTT Platform Link

MQ Telemetry Transport (MQTT) is a lightweight proxy-based message transmission protocol for Publishing/Subscribing. It is designed to be open, simple, lightweight, and easy to implement. These features make it suitable for restricted network environments, including but not limited to high-costs, low-bandwidth and unreliable networks. CPU and memory resources are limited for embedded devices. This protocol provides one-to-many message publishing and discoupling applications using the publish/subscribe message mode. It supports transmission of messages blocked by load content with TCP/IP. Open-source software that supports MQTT, such as ThingsBoard and EMQ, allows customers to develop their own IoT platforms.

6.6.1 MQTT Broker

Cloud Platform >> Platform Type >> Mqtt Broker: Enable, configure domain name, port, username, and password ". Click "Save configuration" and restart, as is shown below.

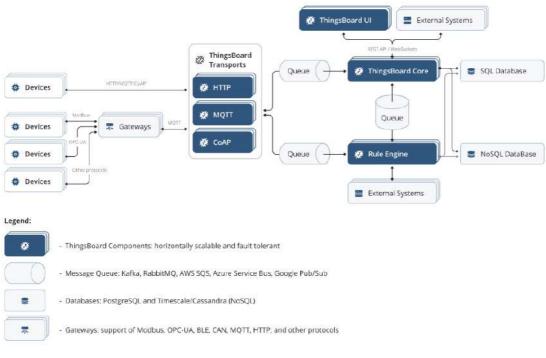
		Vehicle Tracking Gateway Con	
Status	Platform Type	N D C.	
System Settings	Fiantonin Type	Mqtt Broker	
Cellular	Enabled	\checkmark	
OBD Settings	Domain	1	
Cloud Platform	Port	1883	
Security			
1-Wite	username		
Maintenance	password		
Help			
中文	Show Advanced Option		

If you want to view invalid data, click "Show Advanced Options" to see hidden configuration items. Select "Show invalid data", as is shown below.

		Vehicle Tracking Gateway Cor	and en and an and a state of the	
Status				
System Settings	Platform Type	Mqtt Broker	•	
Cellular	Enabled	\checkmark		
OBD Settings	Domain			
loud Platform	Port	1883		
-Wite	username			
laintenance	password	******		
Help	Show Advanced Option			
文	Publish Invalid Data	\checkmark		
Disconnect			Back Read again Save co	onfigurations

6.6.2 Configure ThingBoard Open-source IoT Platform

ThingsBoard is an open-source IoT platform where you can quickly develop, manage, and expand IoT projects. It is an open-source IoT platform for data collection, processing, visualization, and device management. It connects devices through the industry-standard IoT protocols - MQTT, CoAP, and HTTP, and supports cloud and local deployment. For more information, go to <u>https://thingsboard.io</u>.



ThingsBoard Architecture

 Register an account and add a device. After adding a device, use the open Device Device Credentials >> MQTT Basic to enter the Client ID, User Name, and Password parameters. For more information, visit <u>https://thingsboard.io/docs/getting-started-guides</u>.

ThingsBoard	GB Device groups 🔹 🖬 All	Consult additional (Theophile of Child Mater) Bases Constructions (Child Mater) CC Observational Construction
 Home Play and billing 	All: Devices 🥒	VT3102102000207
III Solution templatas	4 Crasted Sume 4	Norme Details Attributes Latastationethy Norms Events Belaizes AultLags
6-9 Rule chame	3021-08-02 11:35:03	V/12/1022000000 V/12/102/102/00000
tų. Data convertere		
1 integrations		Device Credentials X (0TT predentials
😯 Roles		Gredentials type
F Contorners hierarchy		MQTT Basic +
Liter groups Y		UT3102102000207
22 Custamar groups		Liter Name *
🖬 Acaet goups 🗸 👻		InHand207
ED Device proups		Parsent D
LED AN		
D Device profiles		
III Entity view proups 🛛 🗸		Carnel Sine
📸 Widgen Library		
🚦 Dashbawit groups. 👻		
G schedulor		
T ^e White Cabeling 🗸 🗸		
Audit Loge Audit Loge		

Platform Device Parameters

 In the configuration tool, enter the thingsboard.cloud, port number 1883, username User Name, Password, Password of the device parameters added by the platform.

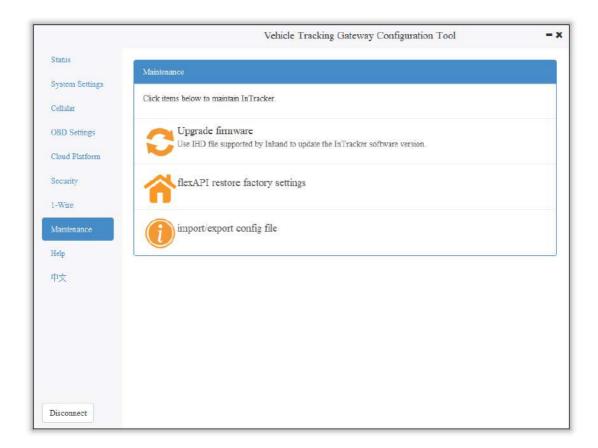
Status		
System Settings	Platform Type	Mątt Broker 👻
Cettutar	Enabled	\square
OBD Settings	Domain	thingsboard.cloud
Cloud Platform	Port	1883
Security 1-Wite	username	xxxxxx
Maintenance	password	
Help	Show Advanced Option	
中文	Publish Invalid Data	

7. Maintenance

You can upgrade the firmware with the local upgrade configuration tool, xshell, or through OTA. OTA upgrading includes Alibaba Cloud standard OTA upgrading, SmartFleet platform OTA upgrading and FlexAPI upgrading. Now we will only introduce how to upgrade with local configuration tools. For more information about upgrading, please contact technical support of InHand Networks.

7.1 Firmware Upgrade

Step 1: Go to Maintenance >> Upgrade firmware, as is shown below:



Step 2: Click "Browse file" to select the firmware. Click "Upgrade" and wait for firmware installation, as is shown below:

		Vehicle Tra	eking Gateway Configuration Tool	- ×	
Status System Settings Cellular	Upgrade f	Browse file	l. ml.		
OBD Settings Cloud Platform		Select Upgrad	1	·	×
Security I-Wire Maintenance Help 中文		Look in:	 PerfLogs Program Files Program Files (x86) Users Windows VT3.V1.0.8.IHD 	· © O O I	
		File name:	VT3. V1. 0. 8. IHD		Open
			Upgrade File(*.IHD)		Cancel

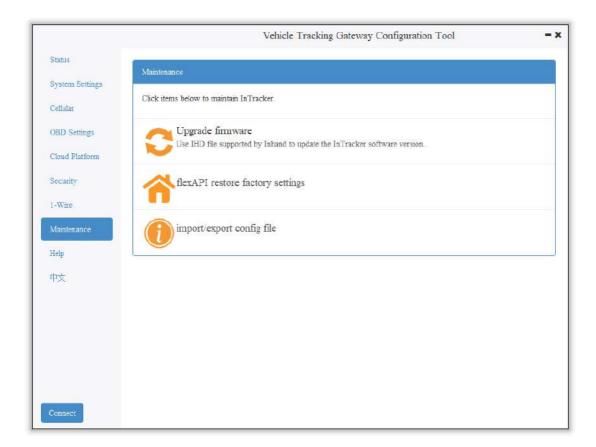
When a prompt box says "Will switch to the new version after restarting VT310", new firmware has been imported successfully. Click "Restart" to upgrade the firmware.

	Vehicle Tracking Gateway Configuration Tool	- >
Status System Sottings Cellular OBD Settings	Upgrade firmware Firmware of InTracker. C:VT3.V1.0.8.IHD	
Cloud Platform Security 1-Wire Maintenance Help 中文	Upgrade success X Will switch to the new version after restarting VT310 OK	
Disconnect	Ва	ck. Upgrade

Note: After the device is upgraded, restart the device and then configure it.

7.2 Restore Factory Settings of FlexAPI

Go to Maintenance >> FlexAPI restore factory settings to reset FlexAPI settings.



7.3 Import/Export Configuration

To back up and import configuration, go to Maintenance >> Import/export congifuration file, as is shown below. Click "Export configuration" to back up configuration, and click "Import configuration" to load the configuration file.

		Vehicle T	racking Gateway	Configuration Tool	-
Status System Settings	import/exp	port config	file		
Cellular	Export configurations	Import configurations			
OBD Settings					
Cloud Platform					
Security					
1-Wite					
Maintenance					
Help					
中文					
Connect				back Read configurations	Save configurations

To back up configuration, click "Export configuration". The configuration tool can read device configuration and pop up file storage window. Enter the name of the backup file, and click "Open".

	Vehicle Tracking Gateway Configuration Tool
Status System Settings Cellular	import/export config file Export configurations Import configurations
OBD Settings	\blacksquare Select the exported configuration file ? \times
Cloud Platform Security	Look in:
1-Wire Maintenance Heip 甲文	 My Comp PerfLogs Program Files Program Files (x86) Users Windows back.json backup.json
	File name: backup.json Open
Disconnect	Files of type: configuration file(*.json)

▲ In the exported configuration file, Username and Password are not available. If you hope to import the modified username and password to the new device, you can modify them in the exported file. Replace the admin characters with a new admin account, and input in the password of the new account. After the modified configuration file is saved, import it into the new device and restart the device. Log in the new device with the new admin account and password.

▲ In the exported configuration file, Username and Password are not available. If you hope to import the modified username and password to the new device, you can add them in the exported configuration file. Enter your admin account in "" of "user:":"", and enter the password in "" of "passwd":"". After the modified configuration file is saved, import it into the new device and restart the device. Log in the new device with the new admin account and password.

. U I	
55	"aliyun_auth_type": "0",
56	"aliyun_deviceSec": "",
57	"aliyun_productSec": "",
58	"tcp_udp_enable": "1",
59	"tcp_udp_domain": "118.122.120.22",
60	"tcp_udp_port": "44444"
61	},
62	"admin": {
63	"user": "admin",
64	"passwd": "123456"
65	}
66	}

8. Restoration of the Default Account and

Password for Hardware

Because configuration usually involves the device certificate file, when the device is restored to the factory via hardware, only the username and password are restored to admin/123456. As is shown in the following picture, press the Reset button with a screwdriver or other tools for more than 8 seconds, and then loosen it.



ps: By double-clicking "Reset", you can restart the device when it goes wrong.

9. How to Get the Device Log

Make sure that the computer is connected to the VT310 through USB to serial port through configuration wire, and open a serial port connection tool such as the serial port debugging software. The software can be downloaded in Mircrosoft Store.

Microsoft Store				-		×
← Home	Gaming Entertair	nment Productivity E	Deals		٩,	
7.3 3.6	This product is inst	alled.		Launch		
Ĉ		Serial Debug lingguang • Develo * * * * * 212 E Professional serial del 1. Receive the incomi the window. More	oper tools > Utilities 숨 Share	l port and display	it in	
ARG 3+	3+ In-App Purchases	Wish list + Offers in-app purchase You can buy on the Xbox (microsoft.com purchase in your area.)	es (One host.			
3+	In-App Purchases		is not available			

 Open the serial port debugging software and select the link serial port. The default baud rate of the serial port is 115200/8/n/1. Click "Open serial port". Note that the Character encoding mode (Character encoding) is ASCII, and the line break mode (Linet break) is \n(LF).

COM3,115200,None,8,One - Serial Debug Assista	ant		- 🗆 🗙
🗚 🛃 ? 😅			٢ <u>٢</u>
Serial Port : G COM3 Y Baud Rate : M 115200 Y Data Bits : 8 Y Parity : None Y Stop Bits : One Y		Language D	SCII ~
Open serial port Receiving settings. Receive and save to file HEX display Pause receiving display Auto break frame ? Receive scripts % Add Timesta ~ Save data Empty data		Keep the screen constant light Press "ESC" to send Show font size A JavaScript Script folder Default	Off On On Change
Send settings. Send a file Extension cmd HEX Send Sending scripts X ADD8 Timing send DTR RTS			
Line break \n (LF) Show Send string	Send : 0	Receive : 0	Reset count

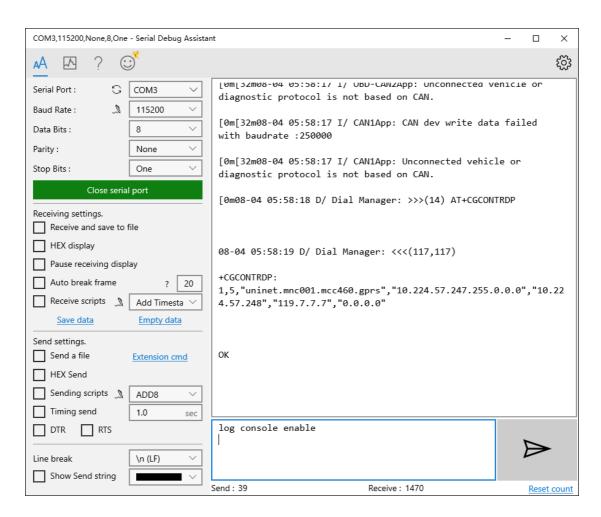
 Enter +++ in the content sending serial port to activate the CLI mode, as is shown below;

Serial Port: COM3 Baud Rate: 115200 Data Bits: 8 Parity: None Stop Bits: One	<u>A</u> A? ©	Ś
Send settings. Send a file Extension cmd HEX Send Sending scripts ADD8 V Timing send 1.0 sec DTR RTS ++++	Baud Rate : 115200 Data Bits : 8 Parity : None Stop Bits : One Close serial port Receiving settings. Receive and save to file HEX display Pause receiving display Auto break frame ?	
Show Send string	Send settings. Send a file Extension cmd HEX Send Sending scripts A ADD8 Timing send DTR RTS Line break \n (LF) \v	Reset count

Enter the Username admin (press the enter key), click "Send", enter the password 123456 (press the enter key), and click send to enter the command line mode.

<u>A</u> 🖸 ? 😅		ŝ	
Serial Port : G COM3 ~			
Baud Rate : 🔊 115200 🗸	Enter cli mode		
Data Bits : 8 ~			
Parity : None ~	username:		
Stop Bits : One ~			
Close serial port			
Receiving settings. Receive and save to file HEX display Pause receiving display Auto break frame ? 20 Receive scripts M Add Timesta \checkmark Save data Empty data Send settings. Send a file Extension cmd			
Send a file <u>Extension cmd</u> HEX Send			
Sending scripts 🐊 ADD8 🗸			
Timing send 1.0 sec			
DTR RTS	admin 	~	
Line break /n (LF) V			
Show Send string	Condi 2 Dessino 21	Development	
	Send: 3 Receive : 31	Reset count	
COM3,115200,None,8,One - Serial Debug Assista		- 🗆 🗙	
COM3, 115200, None, 0, One - Senar Debug Assista	n	THE DOOR	
A M ?	nt	\$	
		THE DOOR	
<u>A</u> A ? ©	Enter cli mode	THE DOOR	
A A ? ©	Enter cli mode	THE DOOR	
A A ? C Serial Port : S COM3 Y Baud Rate : A 115200 Y		THE DOOR	
A Image: A Image: C Serial Port : Image: C Image: C Baud Rate : Image: C Image: C Data Bits : Image: B Image: C	Enter cli mode username: admin	THE DOOR	
A A ? O Serial Port : S COM3 ✓ Baud Rate : M 115200 ✓ Data Bits : 8 ✓ Parity : None ✓	Enter cli mode username: admin password: *****	THE DOOR	
A Image: A Image: C Image: C <th image:<="" td=""><td>Enter cli mode username: admin</td><td>THE DOOR</td></th>	<td>Enter cli mode username: admin</td> <td>THE DOOR</td>	Enter cli mode username: admin	THE DOOR
A A ? COM3 Y Serial Port : S COM3 Y Baud Rate : A 115200 Y Data Bits : 8 Y Parity : None Y Stop Bits : One Y Close serial port Receiving settings.	Enter cli mode username: admin password: *****	THE DOOR	
A A ? C Serial Port : G COM3 ✓ Baud Rate : M 115200 ✓ Data Bits : B ✓ Parity : None ✓ Stop Bits : One ✓ Close serial port Close serial port Receiving settings. Receive and save to file	Enter cli mode username: admin password: ***** login success!	THE DOOR	
A A ? COM3 Y Serial Port : S COM3 Y Baud Rate : A 115200 Y Baud Rate : A 115200 Y Data Bits : B Y Y Parity : None Y Stop Bits : One Y Close serial port Y Receiving settings. Receive and save to file HEX display Pause receiving display Pause receiving display ? 20	Enter cli mode username: admin password: ***** login success!	THE DOOR	
A A ? COM3 Y Serial Port : S COM3 Y Baud Rate : A 115200 Y Baud Rate : A 115200 Y Data Bits : 8 Y Data Bits : 8 Y Parity : None Y Stop Bits : One Y Close serial port X Receiven settings. Receive and save to file HEX display Pause receiving display Pause receiving display Q Auto break frame ? 20 Receive scripts Add Timesta Y	Enter cli mode username: admin password: ***** login success!	THE DOOR	
A A ? COM3 Y Serial Port : S COM3 Y Baud Rate : A 115200 Y Baud Rate : A 115200 Y Data Bits : 8 Y Parity : None Y Stop Bits : One Y Close serial port Close serial port Receive and save to file HEX display Pause receiving display Auto break frame ? 20 Receive scripts Add Timesta Y Save data Empty data	Enter cli mode username: admin password: ***** login success!	THE DOOR	
A A ? COM3 Y Serial Port : S COM3 Y Baud Rate : A 115200 Y Baud Rate : A 115200 Y Data Bits : 8 Y Data Bits : 8 Y Parity : None Y Stop Bits : One Y Close serial port X Receiven settings. Receive and save to file HEX display Pause receiving display Pause receiving display Q Auto break frame ? 20 Receive scripts Add Timesta Y	Enter cli mode username: admin password: ***** login success!	THE DOOR	
A A Serial Port : COM3 Baud Rate : 115200 Baud Rate : 115200 Data Bits : 8 Parity : None Data Bits : 0ne Parity : None Stop Bits : One Close serial port Receive and save to file HEX display Pause receiving display Auto break frame Receive scripts Save data Empty data Send a file Extension cmd HEX Send Sending scripts ADD8	Enter cli mode username: admin password: ***** login success!	THE DOOR	
A A Serial Port : COM3 Baud Rate : A 115200 Baud Rate : Baud Rate : A Data Bits : 8 Parity : None Data Bits : 0ne Parity : None Stop Bits : One Close serial port Receive and save to file HEX display Pause receiving display Auto break frame ? 20 Receive scripts Save data Empty data Send a file Extension cmd HEX Send Sending scripts ADD8 Timing send 1.0	Enter cli mode username: admin password: ****** login success! InTracker />	THE DOOR	
A A ? COM3 Y Serial Port : S COM3 Y Baud Rate : A 115200 Y Data Bits : 8 Y Data Bits : 8 Y Parity : None Y Stop Bits : One Y Close serial port Close serial port Receive and save to file HEX display Pause receiving display Auto break frame ? Auto break frame ? 20 Receive scripts Add Timesta Y Save data Empty data Send settings. Send a file Extension cmd HEX Send I.0 sec Timing send 1.0 sec DTR RTS Intersect	Enter cli mode username: admin password: ****** login success! InTracker />	THE DOOR	

 Enable the log function. In the send text box, enter "log console enable" (press the enter key) and click "Send". The following screenshot shows the log information in the receive window.



4. Close log function, write "log console disable" (press the enter key) in the send text box and click "Send". The receive window stops receiving logs.

COM3,115200,None,8,One - Serial Debug Assis	tant	_		×
🗚 \Lambda ? 😅				ŝ
Serial Port : COM3 V	[0m[32m08-04 06:00:34 I/ MqttTp: Clear MQTT client.			
Baud Rate : 115200 Data Bits : 8	[0m[32m08-04 06:00:34 I/ MqttTp: retry times:346, W seconds to reconnect!	aiting	20	
Parity : None ~	[0m[32m08-04 06:00:35 I/ OBD-CAN2App: CAN dev write	data	fail	ed
Stop Bits : One ✓ Close serial port	with baudrate :500000			
Receiving settings.	[0m[32m08-04 06:00:35 I/ CAN1App: CAN dev write dat with baudrate :500000	a fail	.ed	
Receive and save to file HEX display	[0m[32m08-04 06:00:35 I/ OBD-CAN2App: CAN dev write with baudrate :250000	data	faile	≥d
Pause receiving display	[0m[32m08-04 06:00:35 I/ OBD-CAN2App: Unconnected v	ehicle	or	
Auto break frame ? 20	diagnostic protocol is not based on CAN.		0.	
Save data Empty data	[0m[32m08-04 06:00:35 I/ CAN1App: CAN dev write dat with baudrate :250000	a fail	ed	
Send settings. Send a file Extension cmd	[0m[32m08-04 06:00:35 I/ CAN1App: Unconnected vehic	le or		
HEX Send	diagnostic protocol is not based on CAN.			
Sending scripts ADD8 V Timing send 1.0 sec	[Omlog console disable InTracker />			
	log console disable	,	_	
Line break \n (LF) \				
Show Send string	Send : 59 Receive : 29367		Reset	count

5. If you need to link the configuration tool after exiting the serial port, write "exit" (press the enter key) in the send text box, click "Send" (used to exit the CLI mode), and then close the serial port. Or you wait for 180 seconds when the device automatically exits the CLI mode.