



GV350M Series Manage Tool User Guide

EGPRS/LTE Cat-M1/LTE Cat-NB1/LTE/GNSS Tracker

QSZTRACGV350MMT0101

Version: 1.01

International Telematics Solutions Innovator

www.queclink.com

Document Title	GV350M Series Manage Tool User Guide
Version	1.01
Date	2018-03-06
Status	Released
Document Control ID	QSZTRACGV350MMT0101

General Notes

Queclink offers this information as a service to its customers, to support application and engineering efforts that use the products designed by Queclink. The information provided is based upon requirements specifically provided to Queclink by the customers. Queclink has not undertaken any independent search for additional relevant information, including any information that may be in the customer's possession. Furthermore, system validation of this product designed by Queclink within a larger electronic system remains the responsibility of the customer or the customer's system integrator. All specifications supplied herein are subject to change.

Copyright

This document contains proprietary technical information which is the property of Queclink. Copying of this document, distribution to others or using or communication of the contents thereof is forbidden without express authority. Offenders are liable to the payment of damages. All rights are reserved in the event of a patent grant or the registration of a utility model or design. All specifications supplied herein are subject to change without notice at any time.

Copyright © Queclink Wireless Solutions Co., Ltd. 2019

Contents

0. Revision History.....	1
1. GV350M Series Manage Tool Interface	2
1.1. System Requirements.....	2
1.2. COM Setting	3
1.3. Quick Setting Wizard	3
1.4. Professional Setting Windows.....	4
1.4.1. Title Bar	4
1.4.2. Menus.....	4
1.4.3. Toolbar	7
1.4.4. Status Bar.....	7
1.4.5. Command Browser and Command Operation Space	7
1.5. Operation Result Interfaces.....	10
1.5.1. Interfaces for Successful Operation	10
1.5.2. Operation Failed Interfaces	11
2. Operation Instruction.....	12
2.1. Device Configuration with Quick Setting Wizard	12
2.1.1. Welcome to Quick Setting Wizard.....	12
2.1.2. Network Setting.....	13
2.1.3. Main Server Setting	14
2.1.4. Fixed Time Report Setting	15
2.1.5. Sending Command to the Device	16
2.2. Device Configuration in Professional Setting Mode	17
2.3. Read/Save All Configuration	18
2.4. Load/Send All Configurations	19

0. Revision History

Version	Date	Author	Description of Change
1.01	2018-03-06	Canning Wang	Released

1. GV350M Series Manage Tool Interface

GV350M Manage Tool is used to configure parameters for GV350M through UART. It is easy for developers to configure GV350M with it for the interface is simple and functional. All commands can be also sent by SMS or Network.

The Queclink administrators can also use the Manage Tool to configure GV350M before delivery to its customers. But it is recommended for the customers to establish a backend server and to control GV350M by SMS or Network. Please refer to “GV350M @Track Air Interface Protocol” for details.

Before using the Manage Tool, please install driver for the USB data cable (DATA CABLE_M). After that a new COM port will be found in your computer, and then please refer to the following steps:

1. Connect GV350M to 12VDC power supply and GV350M will power on.
2. Connect GV350M to PC with USB data cable (DATA CABLE_M).
3. Run “GV350M Manage Tool Vx.xx.exe”.

1.1. System Requirements

Make sure the computer system meets the following configurations before installing the Manage Tool:

- ◆ Windows XP SP2 and above (32 & 64 bit);
- ◆ Windows Server 2003 (32 & 64 bit);
- ◆ Windows Server 2008 (32 & 64 bit);
- ◆ Windows Vista (32 & 64 bit);
- ◆ Windows 7 (32 & 64 bit);
- ◆ Windows 8 (32 & 64 bit);

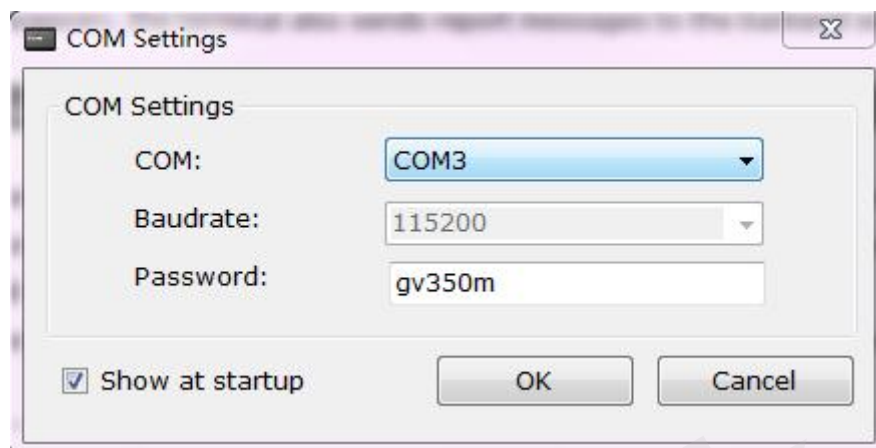
Supported System Environments:

- ◆ Microsoft .NET Framework 4.0 or higher

Microsoft .NET Framework 4.0 download link:

<http://www.microsoft.com/en-US/download/details.aspx?id=17718>

1.2. COM Setting



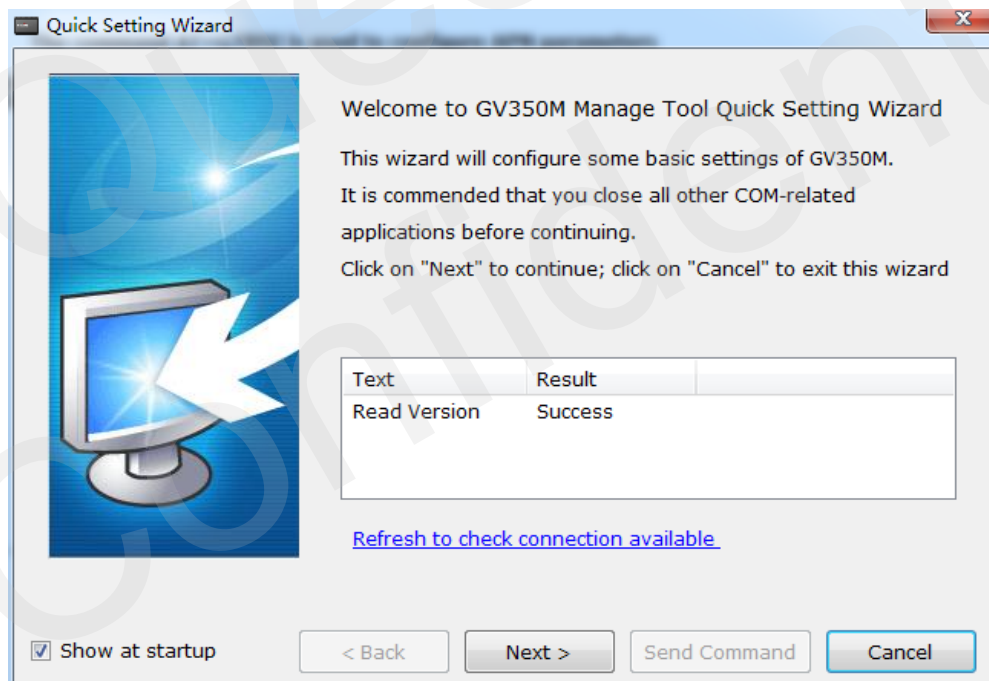
Select the COM port and baud rate (115200bps by default). Input the password ("gv350m" by default) and click "OK" button, the setting window will display.

1.3. Quick Setting Wizard

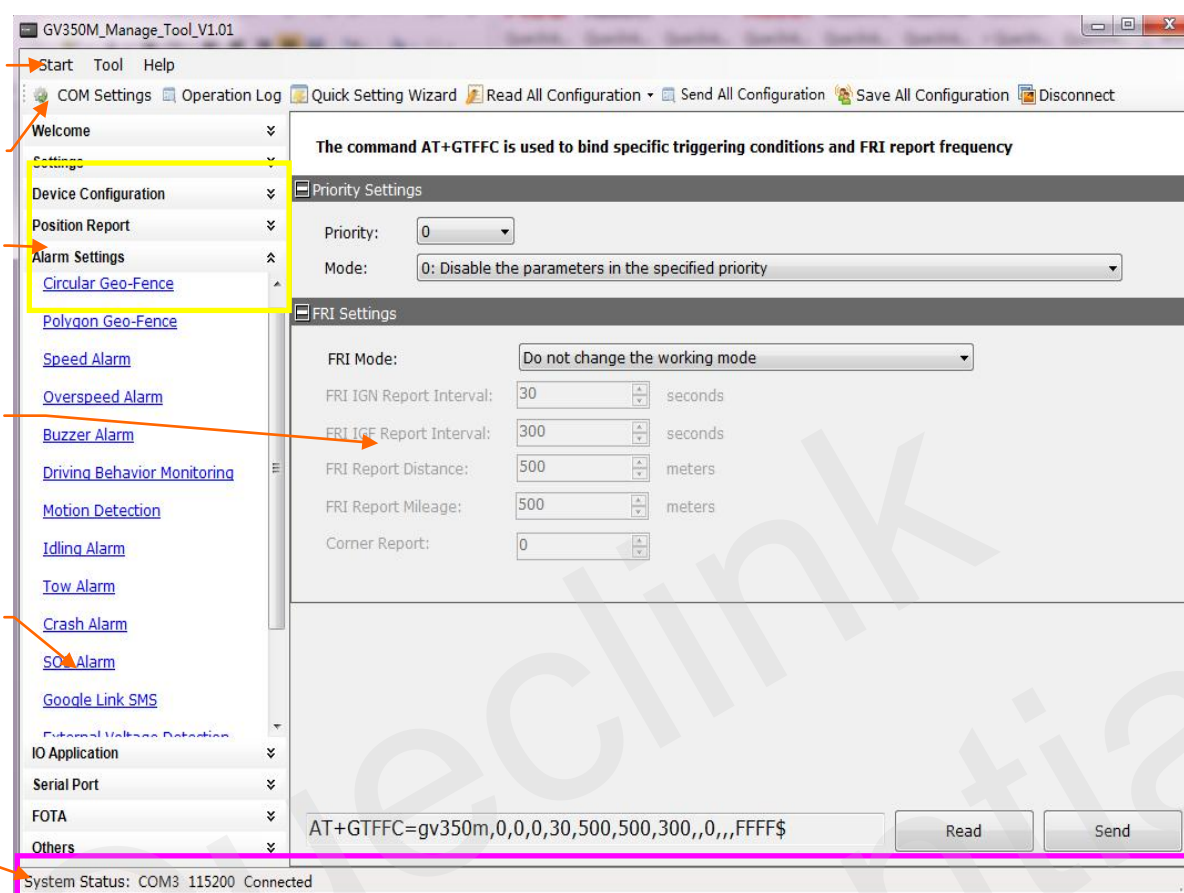
The Quick Setting Wizard is used to configure basic settings for the device. Select professional setting mode if more functions are required.

Make sure the COM connection is OK before using Quick Setting Wizard.

Please refer Chapter 2.1 for the detail of setting with Quick Setting Wizard.



1.4. Professional Setting Windows



1.4.1. Title Bar

Title Bar indicates current operational command title and the name of Manage Tool.

1.4.2. Menus

The Menus contains “Start”, “Tool” and “Help” buttons.

Start Tool Help

1.4.2.1 Start Menu

Start menu contains “COM Settings”.

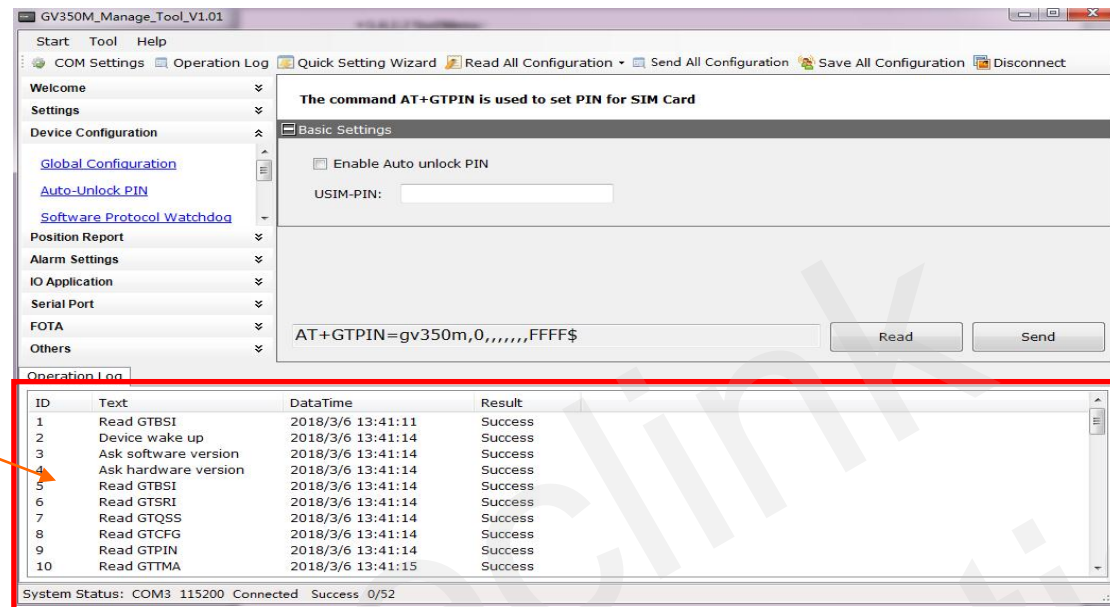
[COM Setting]: It is used to set the COM information and password. Please refer to Chapter 1.2 for details.

1.4.2.2 Tool Menu

Tool menu contains “Quick Setting Wizard”, “Operation Log” and “Options” settings.

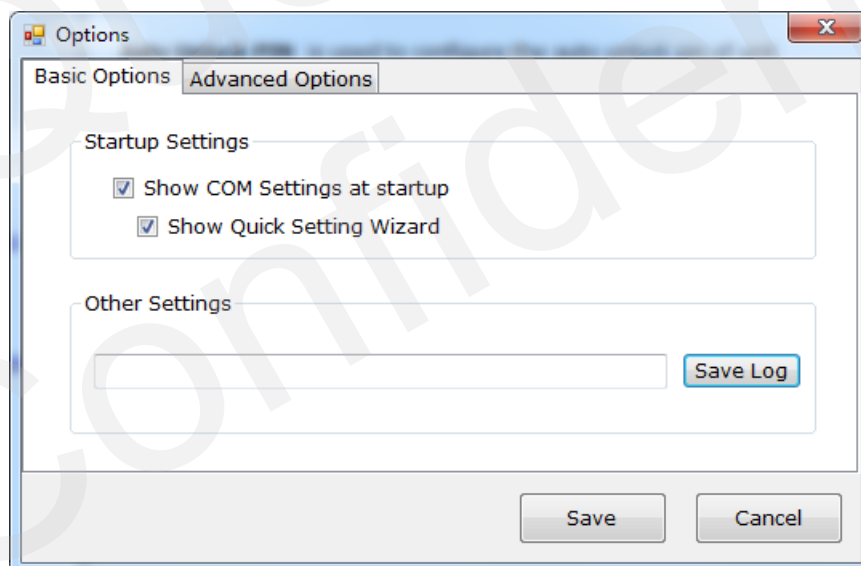
[Quick Setting Wizard]: It is used to open Quick Setting Wizard directly. Please refer to Chapter 2.1 for details.

[Operation Log]: It is used to display/hide the operation log.



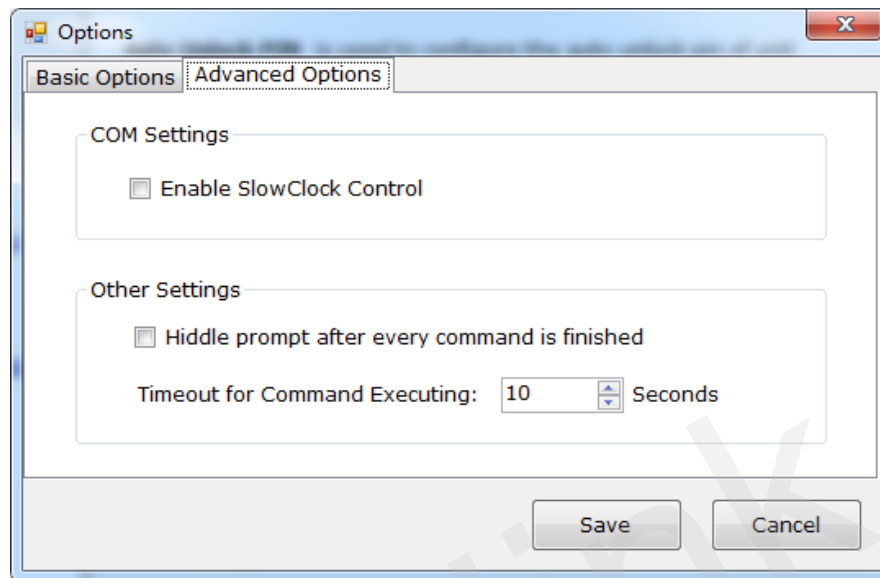
[Options]: It is used to set the basic settings of Manage Tool.

“Basic Options” contains Startup Settings option and Save Log option.



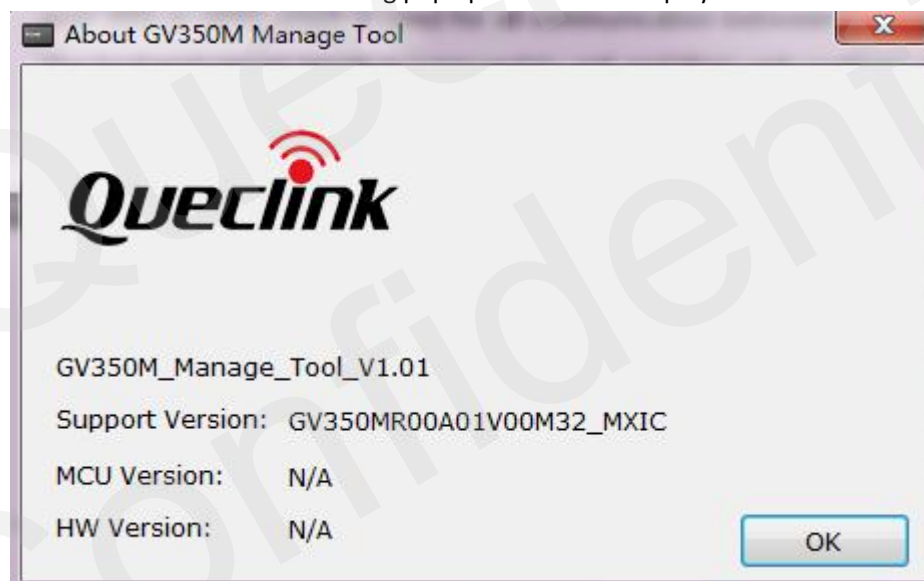
“Advanced Options” contains COM Settings and Other Settings.

COM Settings is used to set COM setting. It is recommended to use default settings.



1.4.2.3 Help Menu

[About]: Select “About”. Then the following pop up window will display.



“Manage Tool Version” indicates the version of the Manage Tool.

“Support Version” indicates the firmware which the Manage Tool is used for.

“MCU Version” indicates the device’s MCU version.

“HW Version” indicates the device’s HW version.

1.4.3. Toolbar

It contains “COM Setting”, “Operation Log”, “Quick Setting Wizard”, “Read All Configuration”, “Send All Configuration”, “Save All Configuration”, and “Connect/Disconnect to COM”.

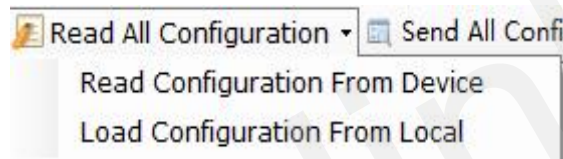


[COM Setting]: It is used to set the COM information and password. Setting details please refer to Chapter 1.2.

[Operation Log]: It is used to display/hide operation log.

[Quick Setting Wizard]: It is used to open Quick Setting Wizard directly. Please refer to Chapter 2.1 for details.

[Read All Configuration]: There are two options as shown below: “Read From Device” and “Load Configuration From File”.



“Read Configuration From Device”: It is used to read all the configurations (except command GTDAT) from the device.

“Load Configuration From Local”: It is used to load local configuration file to the Manage Tool.

[Send All Configuration]: It is used to execute all parameter configurations (except command GTQSS, GTDAT, GTRTO) in Command Operation Space.

[Save All Configuration]: It is used to save all parameter configurations to file.

[Connect/Disconnect to COM]: It is used to connect/disconnect COM manually.

1.4.4. Status Bar

System Status: COM41 115200 Connected Read GTSOS success

The Status Bar displays system status and current status.

[System Status]: It indicates the serial number of commands waiting to be executed.

1.4.5. Command Browser and Command Operation Space

This area is mainly used to read and set parameters of the device.

1.4.5.1 Command Browser

Command Browser divides all @track protocol commands into several parts. Click Title Bar in the Command Browser, parameters of this command will be shown in Command Operation Space.

Command Browser	Function Description	Command
Server Connection	APN Setting	GTBSI
	Server Setting	GTSRI
	Quick Start	GTQSS
Device Configuration	Global Configuration	GTCFG
	Auto-Unlock PIN	GTPIN
	Software Protocol watchdog	GTDOG
	Outside Working Hours	GTOWH

	Time Adjustment	GTTMA
	Preserve output logical state	GTPDS
	Hex Report	GTHRM
Position Related Report	Fixed Report	GTFRI
	Frequency Change of Fixed Report	GTFFC
Alarm Settings	Circular Geo-Fence	GTGEO
	Polygon Geo-Fence	GTPEO
	Speed Alarm	GTSPD
	Over Speed Alarm	GTSPA
	Buzzer Alarm	GTBZA
	Driving Behavior Monitoring	GTHBM
	Motion Detection	GTSSR
	Idling Alarm	GTIDL
	Tow Alarm	GTTOW
	Crash Alarm	GTCRA
	SOS Alarm	GTSOS
	Google Link SMS	GTGLM
	External Voltage Detection	GTEPS
	Temperature Alarm	GTTMP
	Roaming Alarm	GTRMD
	Binding SIM Card	GTSIM
IO Application	Digital Output Port Settings	GTOUT
	Digital Input Port Setting	GTDIS
	Input/Output Port Binding	GTIOB
	Analog Input Port Setting	GTAIS
Serial Port Application	Serial Port Setting	GTURT
	Data Transfer	GTDAT
	ID Authentication	GTIDA
	External Digital Fuel Sensor	GTEFS
	Fuel Sensor Calibration Table	GTFSC
	Camera Setting	GTCMS
	Taking picture in Real Time	GTTAP
	FTP server Setting	GTFTP
FOTA Application	Update Configuration	GTUPC
	Fuel Sensor Upgrade	GTUFS
	CANBUS Upgrade	GTCFU
Other Settings	Hour Meter Counter	GTHMC
	White List	GTWLT
	CANBUS Configuration	GTCAN
	CANBUS Alarm	GTCLT
	Command Storage	GTCMD
	User Defined Function	GTUDF
	Real Time Operation	GTRTO

1.4.5.2 Command Operation Space

Command Description

Parameters Area

Command Display

The command AT+GTSRI is used to set server parameters and data report mode

Basic Settings

Report Mode: TCP long-connection mode

Backend Server Settings

Main Server IP: 218.17.46.11

Main Server Port: 0

Backup Server IP:

Backup Server Port: 0

SMS Gateway: 13310854157

Other Settings

Heartbeat Interval: 0 Minutes

Buffer Mode: 1: Low priority

Protocol Format: ASCII

SACK Enable: Disable SACK

☐ SMS ACK Enable

AT+GTSRI=gv350m,3,,1,218.17.46.11,0,,0,13310854157,0,||

Read
Send

[Command Description]: It is a short description of a command.

[Parameters Area]: Set/Read current command parameters in this area.

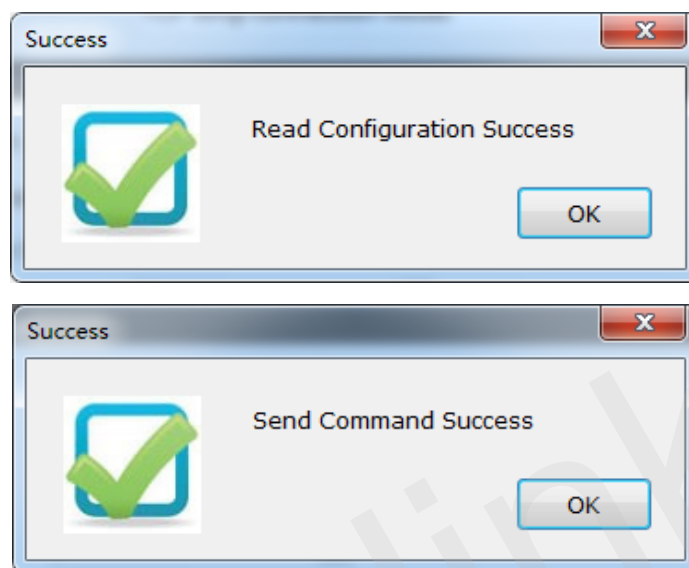
[Command Display]: It shows the command and corresponding parameter information in Parameters Area.

[Read]: Click this button to read the command from the device.

[Send]: Click this button to send the command to the device.

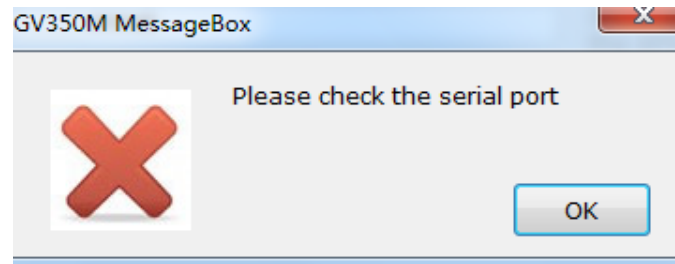
1.5. Operation Result Interfaces

1.5.1. Interfaces for Successful Operation

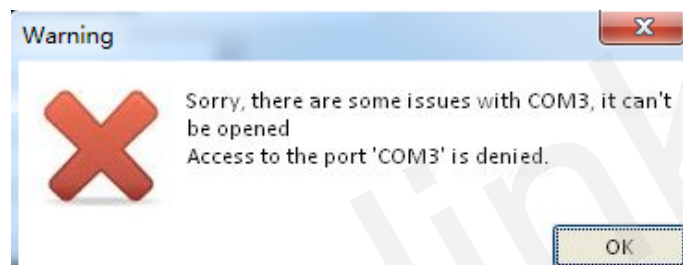


1.5.2. Operation Failed Interfaces

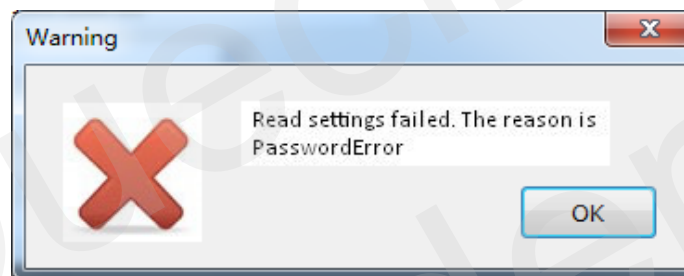
Problem may be with the COM port connection if following error occurs.



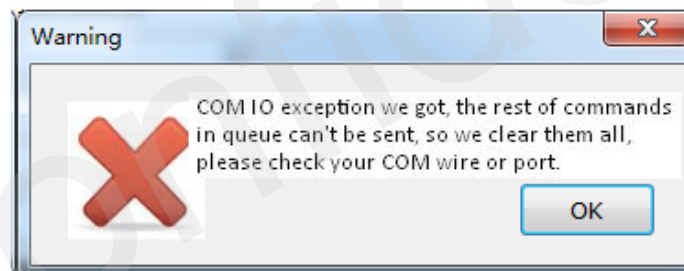
Current COM port may be occupied. Please close all other COM-related applications.



Please input the correct device password if Password Error occurs.



Problem may be with the COM. Please check the USB cable and the serial port



2. Operation Instruction

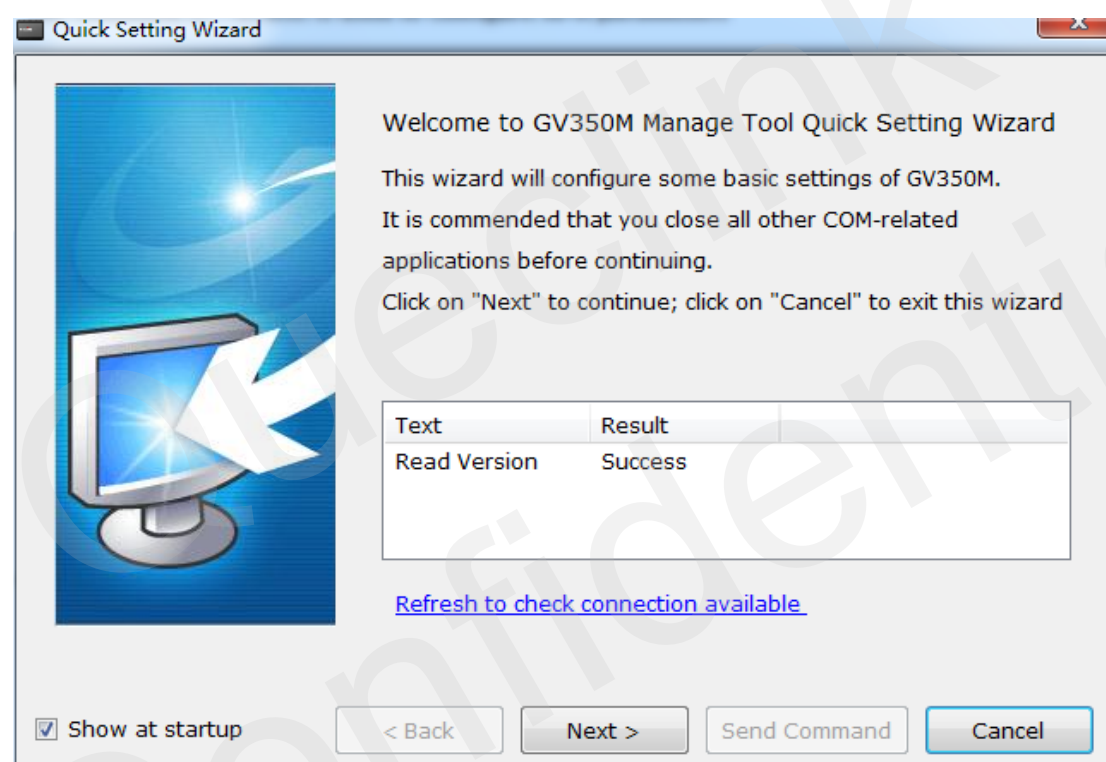
2.1. Device Configuration with Quick Setting Wizard

The Manage Tool is developed based on the @Track Air Interface Protocol. Please refer to “GV350M @Track Air Interface Protocol” for details.

The Quick Setting Wizard is used to configure basic settings for the device. Select professional setting mode if more functions are required.

2.1.1. Welcome to Quick Setting Wizard

Click “Quick Setting Wizard” in toolbar to open the Quick Setting Wizard. If the “Result” in this window is “Success”, click “Next”. If the “Result” is “Fail”, please check the COM port connection till the result is OK.

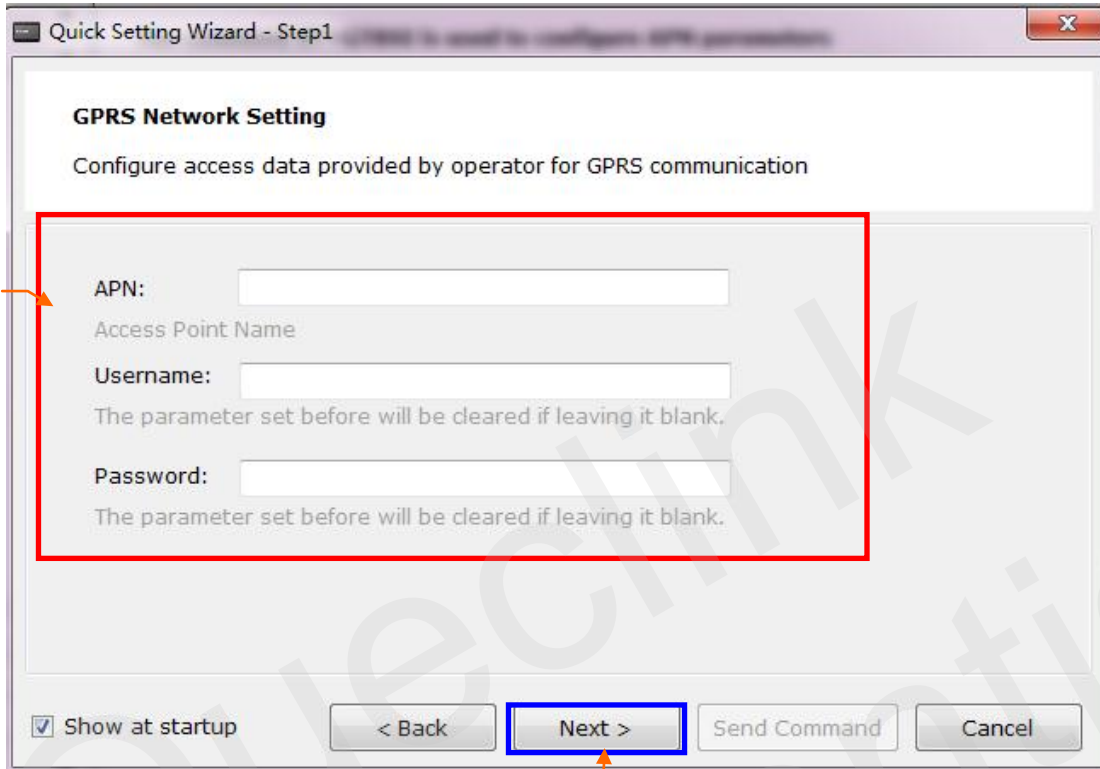


Welcome to Quick Setting Wizard

2.1.2. Network Setting

Step 1: Set APN, APN user name and password through the window below. For the meanings of these parameters, please refer to the “GV350M @Track Air Interface Protocol” for details.

Step 2: Then click “Next”.



The screenshot shows a window titled "Quick Setting Wizard - Step1" with a subtitle "GV350M is used to configure GPRS parameters". The main heading is "GPRS Network Setting" with the instruction "Configure access data provided by operator for GPRS communication". A red box highlights the input fields for "APN:", "Username:", and "Password:", each with a text description below it. "APN:" is followed by "Access Point Name". "Username:" and "Password:" are both followed by "The parameter set before will be cleared if leaving it blank." At the bottom, there is a checkbox "Show at startup" which is checked, and four buttons: "< Back", "Next >" (highlighted with a blue box), "Send Command", and "Cancel".

Step 1

APN:
Access Point Name

Username:
The parameter set before will be cleared if leaving it blank.

Password:
The parameter set before will be cleared if leaving it blank.

☒ Show at startup

< Back **Next >** Send Command Cancel

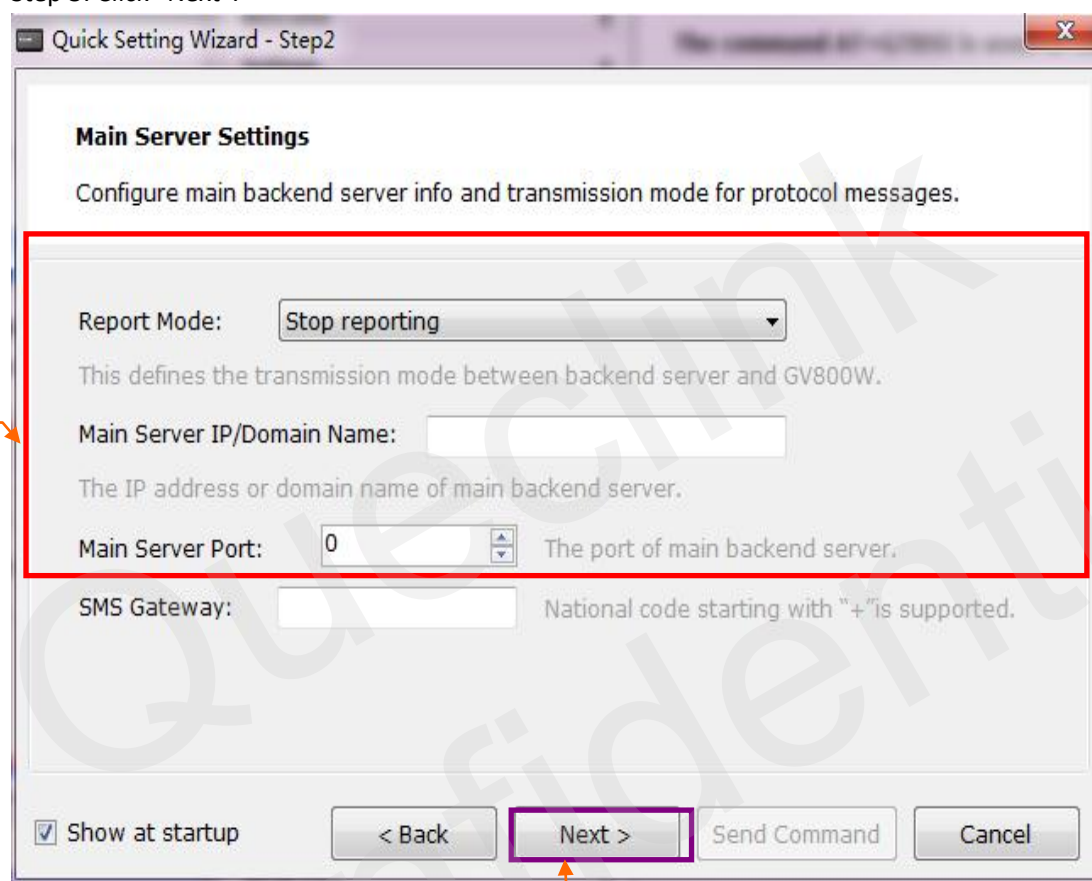
Step 2

2.1.3. Main Server Setting

Step 1: Set report mode, main server IP/domain name, main server port, and SMS gateway through the window below. For the meanings of these parameters, please refer to the “GV350M @Track Air Interface Protocol” for details.

Step 2: Click “Check if main backend server is available” to check if main server IP and port is valid in network. If the result is ERROR, please check the server connection. You cannot get report from server if the server connection has problem.

Step 3: Click “Next”.



Quick Setting Wizard - Step2

Main Server Settings

Configure main backend server info and transmission mode for protocol messages.

Report Mode: This defines the transmission mode between backend server and GV800W.

Main Server IP/Domain Name: The IP address or domain name of main backend server.

Main Server Port: The port of main backend server.

SMS Gateway: National code starting with "+" is supported.

☒ Show at startup

< Back **Next >** Send Command Cancel

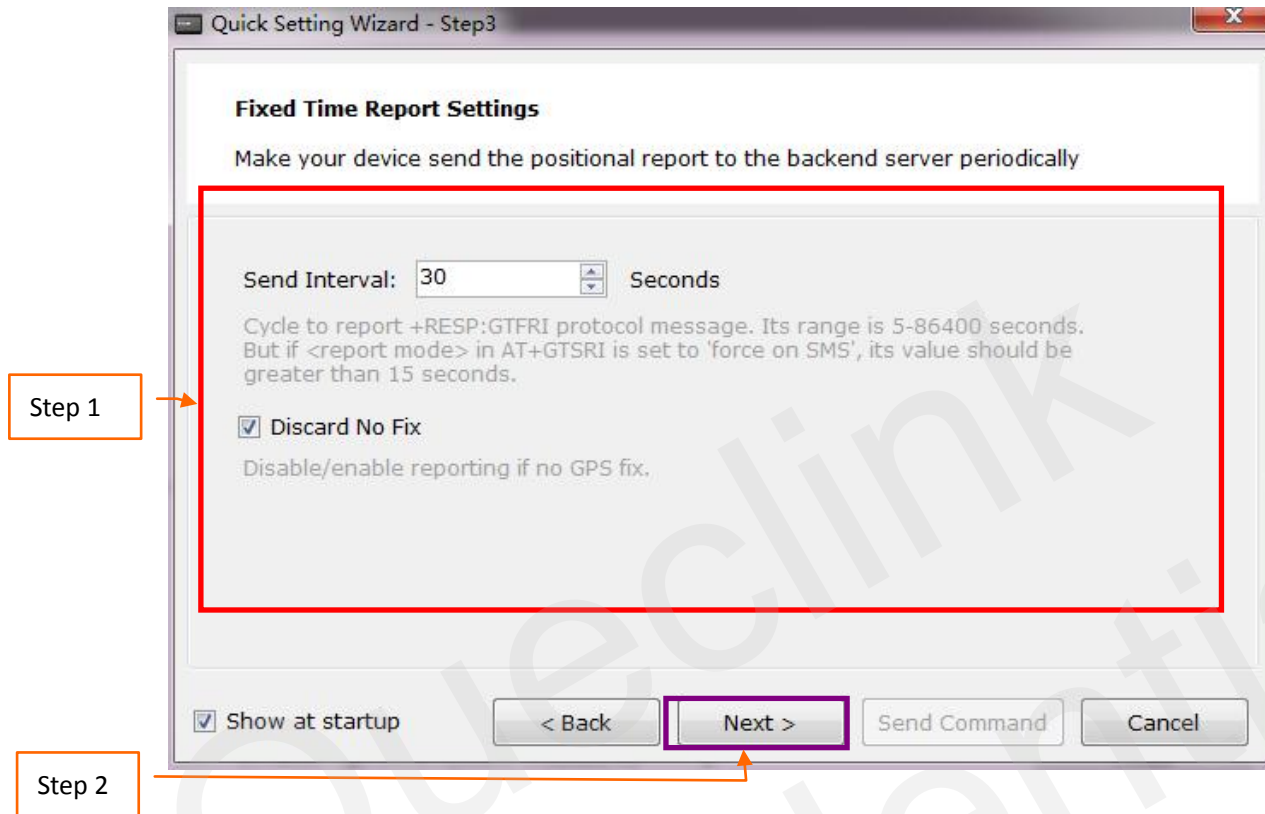
Step 1

Step

2.1.4. Fixed Time Report Setting

Step 1: Set send interval, discard no fix through the window below. For the meanings of these parameters, please refer to the “GV350M @Track Air Interface Protocol” for details.

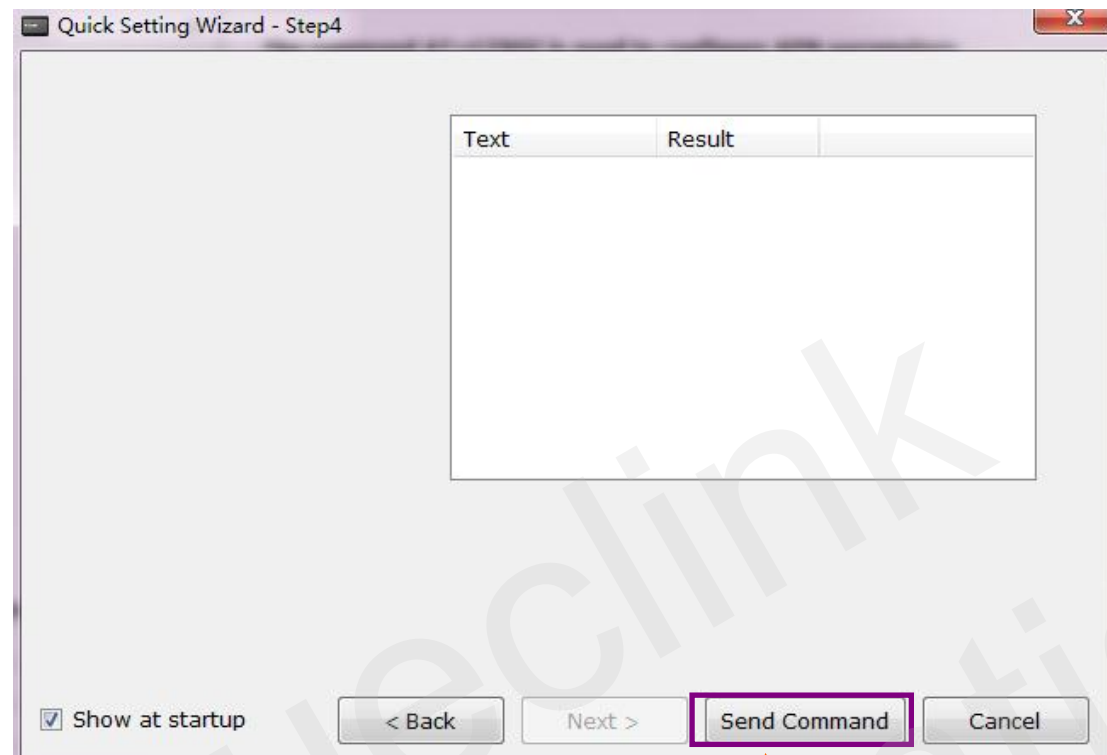
Step 2: Click “Next”.



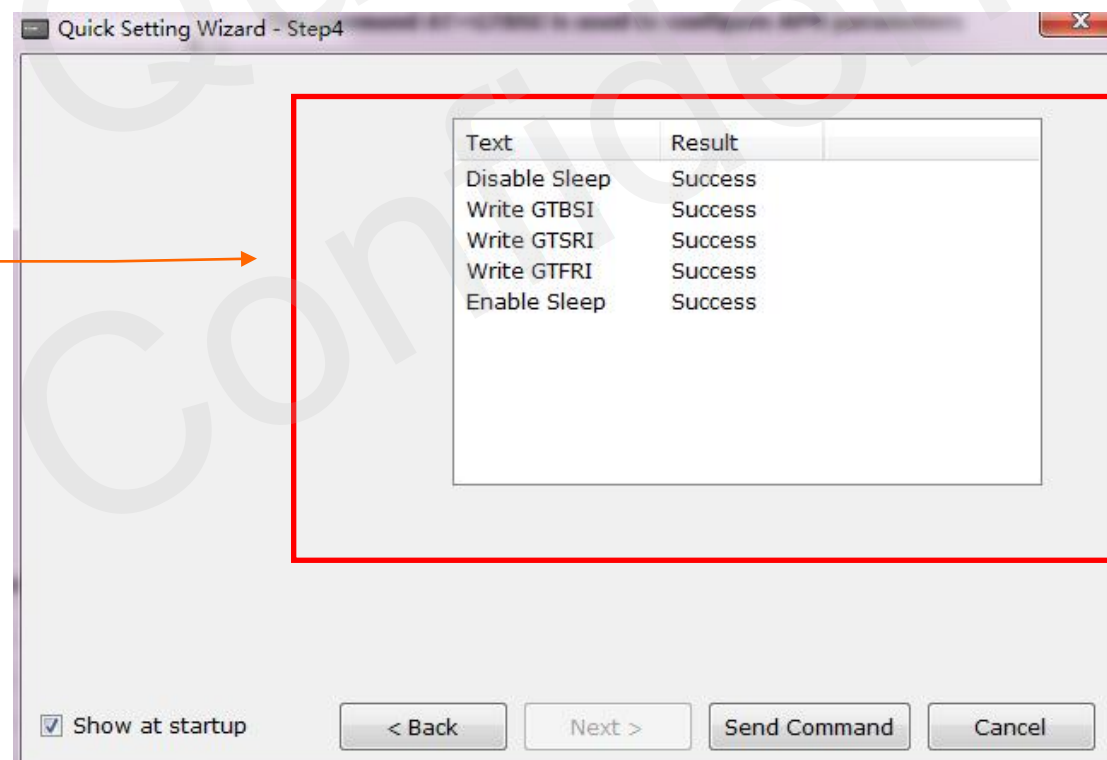
2.1.5. Sending Command to the Device

Step 1: Click "Send Command". The Command GTBSI, GTSRI and GTFRI will send to device.

Step 2: If the settings are downloaded successfully, click "OK" to end the Quick Setting Wizard.



Step 1



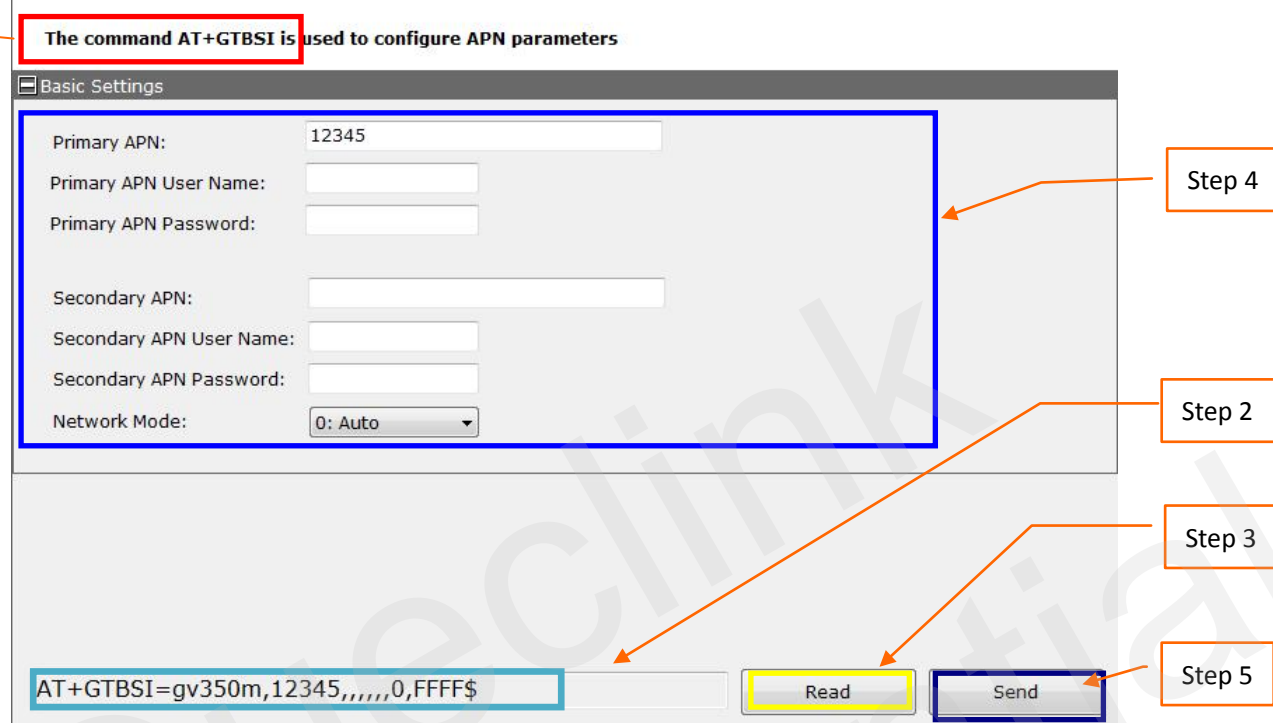
Step 2

2.2. Device Configuration in Professional Setting Mode

The Manage Tool is developed based on the @Track Air Interface Protocol. Please refer to “GV350M @Track Air Interface Protocol” for details.

Following is a general procedure to configure GV350M with the Manage Tool.

Step 1 → The command **AT+GTBSI** is used to configure APN parameters



Step 4 → Primary APN: 12345
Primary APN User Name:
Primary APN Password:
Secondary APN:
Secondary APN User Name:
Secondary APN Password:
Network Mode: 0: Auto

Step 2 → Read

Step 3 → Send

Step 5 → Send

Step 1: Select “Bearer Setting Information”, after that the parameters of GTBSI will be shown in Command Operation Space.

Step 2: The to-be-sent command message will be generated based on the inputs. Please note that the command message can also be sent to GV350M through SMS or GPRS.

Step 3: Read the parameters from GV350M and modify them as needed.

Step 4: Set APN parameters. Please refer to “GV350M @Track Air Interface Protocol” for the meaning of each parameter.

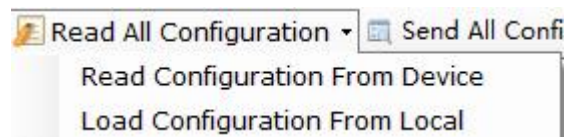
Step 5: Click the “Send” button to download the parameters of GTBSI to GV350M.

Note:

The parameters of GTSRI and GTBSI will also be changed when the parameters of GTQSS are changed.

2.3. Read/Save All Configuration

Step 1: It is recommended to read all configurations from the device and save the original configurations to your desktop. Select “Read All Configuration” → “Read Configuration From Device”



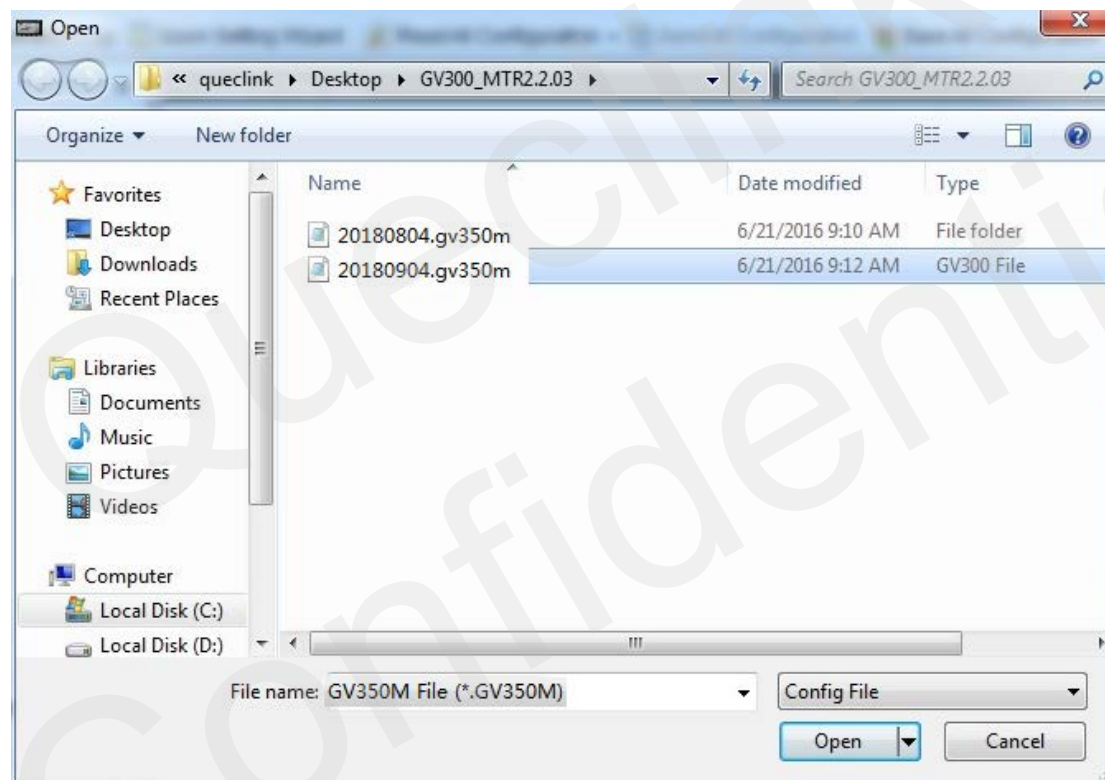
Note:

Command GTDAT will not be read.

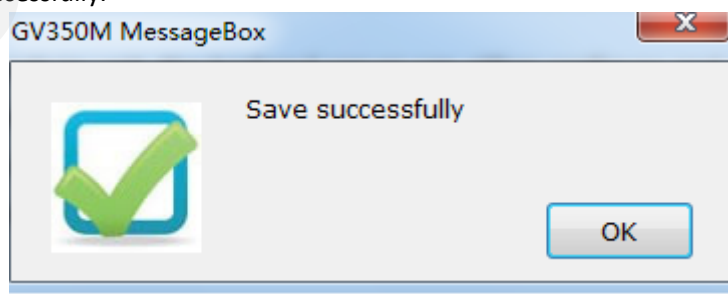
Step 2: After reading successfully, click “Save All Configuration” in toolbar.



Step 3: Select a folder, key in the name of the configuration file, and then click “Save” button.

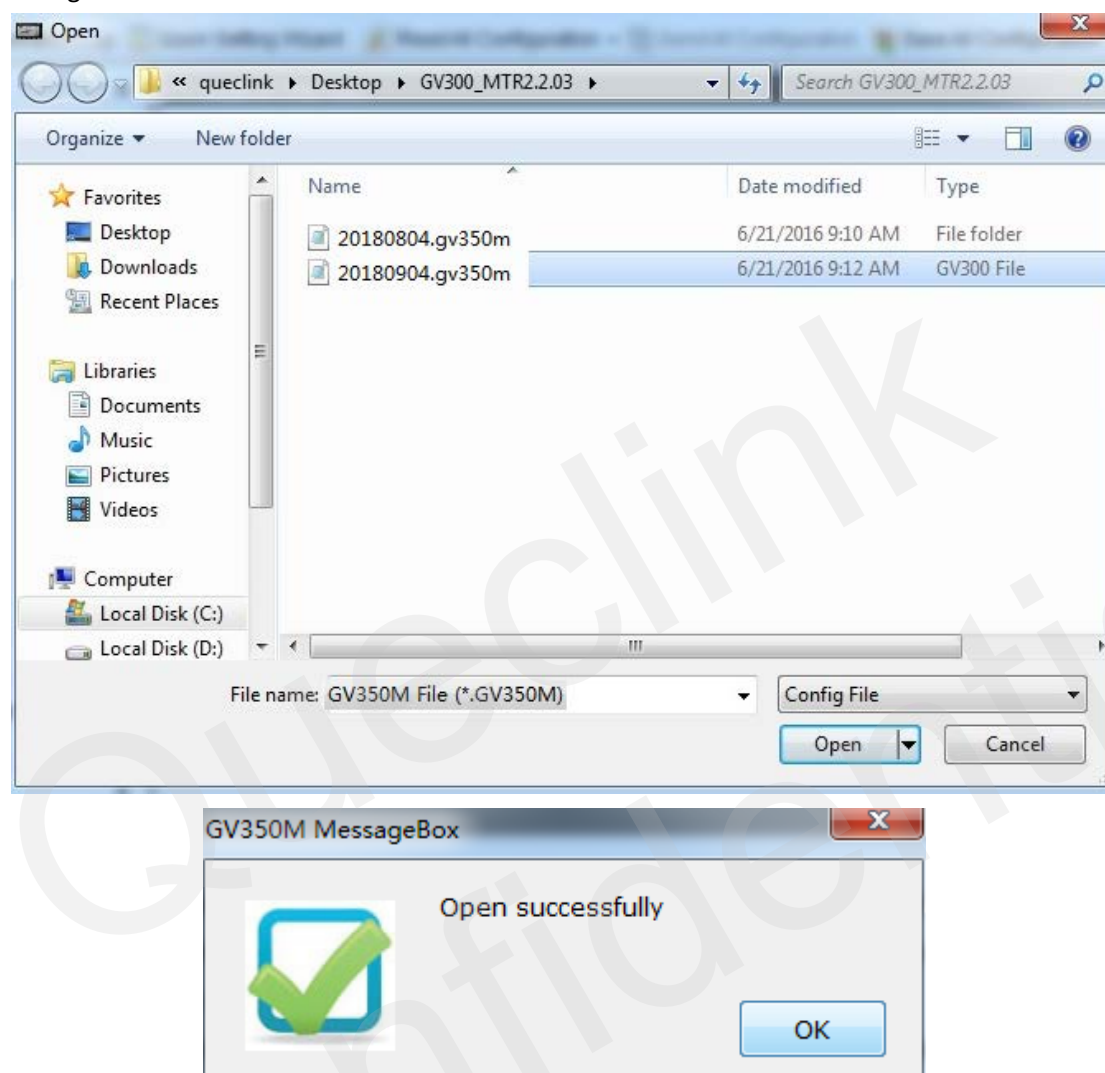


Step 4: Save successfully.



2.4. Load/Send All Configurations

Step 1: Load the configuration file or set all parameters of the commands before executing them. Select “Read All Configuration”→ “Load Configurations From Local”, and then select the needed configuration file.



Step 2: You can set the parameters of the commands based on the configuration file, and then click “Send All Configuration” in toolbar.



Note:

Command GTQSS, GTDAT, GTRTO will not be sent.

Step 3: The Manage Tool will send all commands to the device.