

TR07B Integrated GNSS Receiver User Manual

GNSS Products

Version: 1.0.0

Date: 2026-08-03



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About the Document

Revision History

Version	Date	Author	Description
-	2026-07-03	Phoebe Xu	Creation of the document
1.0.0	2020-08-03	Phoebe Xu	Preliminary

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1 Product Overview

The TR07B is a high-performance, all-in-one GNSS receiver that supports full-constellation, multi-frequency tracking. Designed to function as a base station, it delivers precise GNSS corrections and positioning for a wide range of high-accuracy applications.

The TR07B supports flexible data transmission and remote management via cellular, Ethernet, and Wi-Fi interfaces. An intuitive web-based interface allows for easy monitoring and configuration over local networks.

Engineered for harsh environments, the TR07B features a rugged IP67-rated enclosure, ensuring reliable operation and long-term durability in outdoor conditions. Its low power consumption and integrated compact design make it ideal for space- and energy-constrained deployments.

1.1 Application Scenarios

It can be deployed as a base station in applications such as lawn mowers, agricultural machinery and related fields.

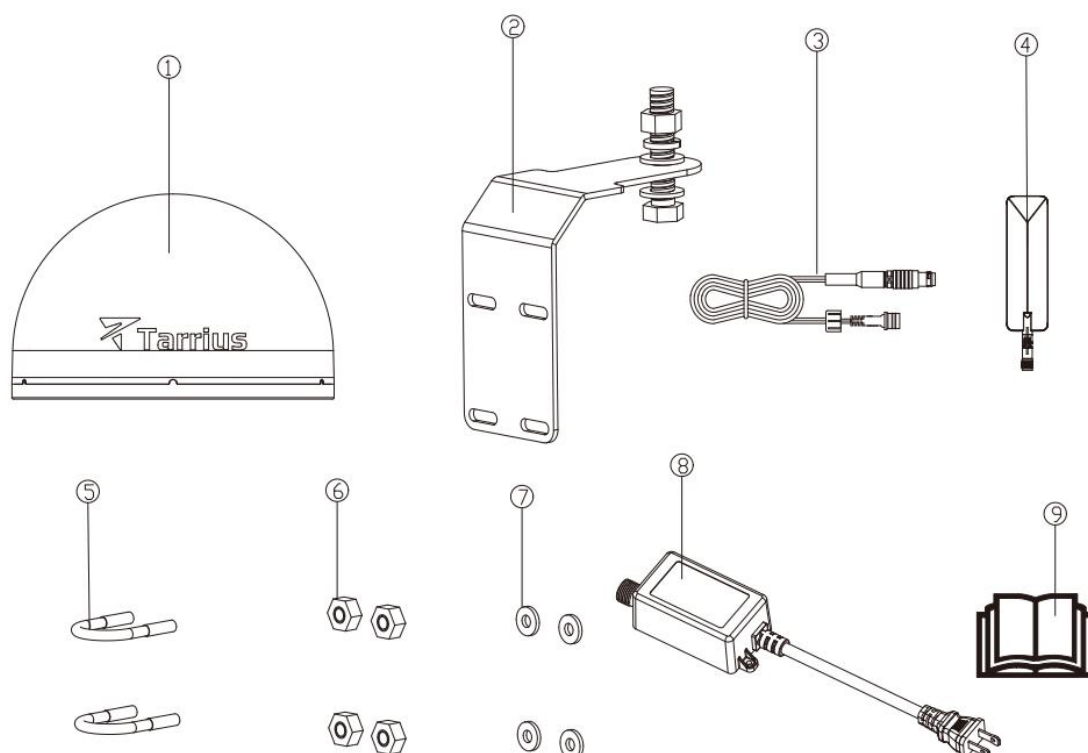
1.2 Specifications

Table 1: Specifications

Items		Description	
GNSS	Supported Systems/Frequencies	GPS	L1 C/A, L2C, L5
		GLONASS	L1, L2
		Galileo	E1, E5a, E5b, E6
		BDS	B1I, B1C, B2a, B2b, B3I
		QZSS	L1 C/A, L2C, L5
		NavIC	L5
MEMS	Accelerometer	Range	±2000mg
		Resolution	1mg

Items		Description
Wireless Communication	Cellular	LTE-FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66 LTE-TDD: B34/38/39/40/41 WCDMA: B1/2/4/5/6/8/19 GSM/EDGE: B2/3/5/8
	Wi-Fi	≤ 10 m range
	Sub-GHz	≤ 500 m range (Region: NA / EU)
Wired Communication	Ethernet RJ45	IEEE 802.3
	RS-485	Modbus protocol support
	RS-232	NMEA 0183, RTCM 3.x protocols support
Electrical Characteristics	Power Input	DC 9–36 V (Typical: 28 V)
	Typical Power Consumption	≤ 2.5 W
Interfaces	LEDs	Red (Power status indicator), Blue (Satellite status indicator), Orange (Cellular status indicator)
	SIM Slot	Nano-SIM
	Connectors	LEMO (Power/RS-232/RS-485), TNC (Sub-GHz antenna), RJ45
Cable	Length	Default 10 m
Physical	Dimensions	Ø220 × 149 mm
	Weight	2.1 kg
Environmental Adaptability	Operating Temperature	-30 °C to +60 °C
	Storage Temperature	-30 °C to +80 °C
	Humidity	0 – 95 % RH
	ESD Protection	Contact discharge: ±8 kV, air discharge: ±15 kV
	Protection Rating	IP67
Power Adapter		28V/1.3A
Mounting Bracket		pole mounting, wall mounting

1.3 Contents of Package



No.	Name	Quantity
1	Reference station	1
2	Support bracket	1
3	Low-voltage cable	1
4	Sub-GHz antenna	1
5	Post bracket	2
6	Nuts	4
7	Washers	4
8	Power supply	1
9	Operator's manual	1

2 Appearance, Interfaces and Dimensions

This section displays images that represent the appearance, interfaces, and dimensions. These exhibited images serve illustrative purpose only and may not accurately reflect the actual product. To view the authentic appearance and label, please refer to the product you have received from Quectel.

2.1 Appearance



Figure 1: Front View

2.2 Interfaces

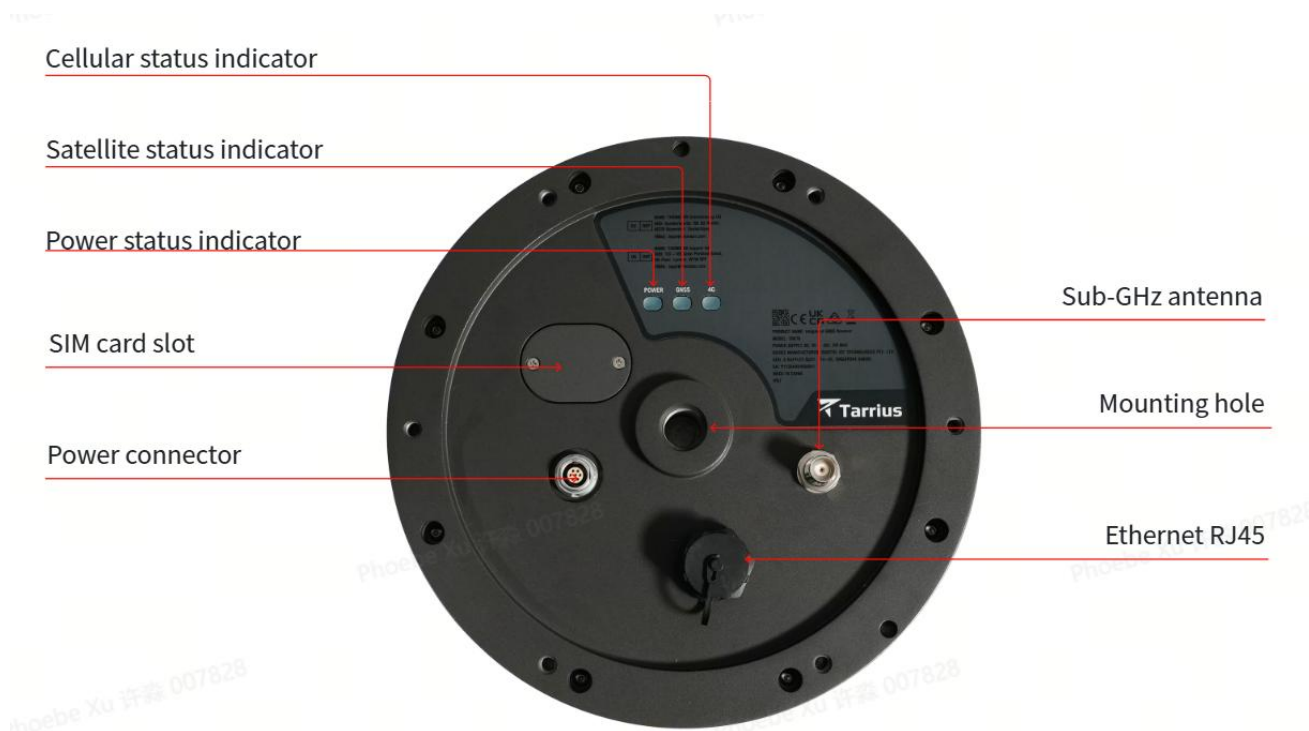


Figure 3: Product Interfaces

Table 2: Product Interfaces

No.	Name	Description
1	Cellular status indicator	On: Network registration successful. Off: Network registration not successful.
2	Satellite status indicator	Flashes 5 times per second: Positioning successful. Off: Positioning not successful.
3	Power status indicator	On: Power-on successful. Off: Power-on failed.
4	SIM card Slot	Connect the Nano SIM card.
5	Power connector	Connect the adapter cable.
6	Ethernet RJ45	Connect the network cable.
7	Mounting hole	Connect the support bracket.
8	Sub-GHz antenna	Connect the Sub-GHz antenna.

2.3 Dimensions

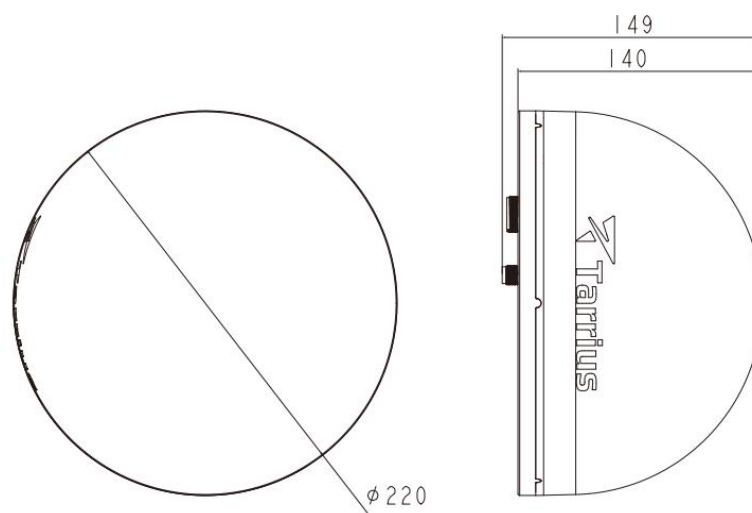


Figure 4: Dimensions (Unit: mm)

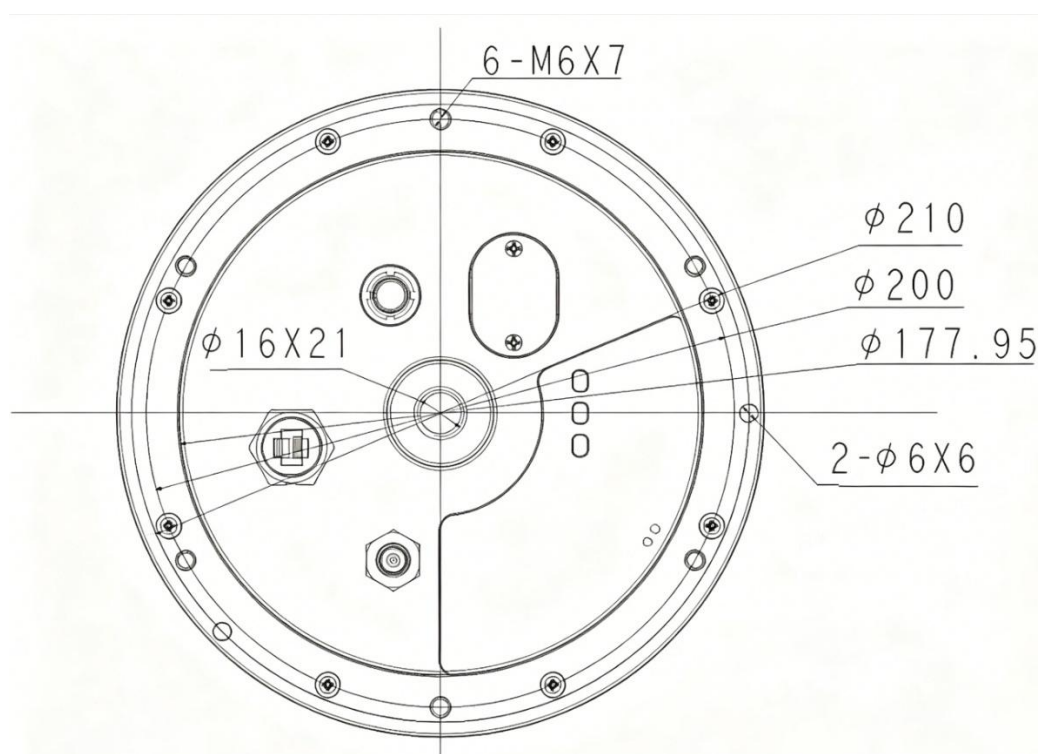
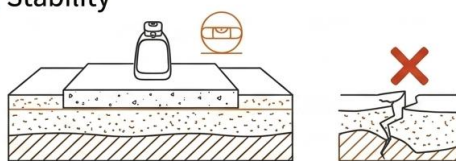


Figure 5: Dimensions (Unit: mm)

3 Assembly and Installation

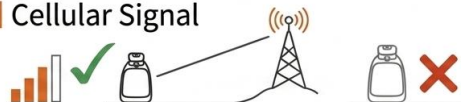
3.1 Site Selection Criteria

Stability



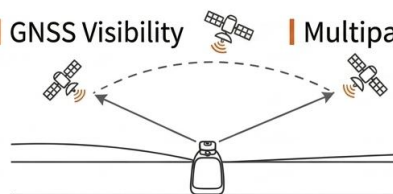
Install on geodetically stable ground (minimal deformation risk).

Cellular Signal



Ensure stable data transmission.

GNSS Visibility



Open sky view; avoid obstructions.

Multipath Avoidance



EMI Mitigation



Distance from power stations/strong RF sources.

- Stability: Install on geodetically stable ground (minimal deformation risk).
- GNSS Visibility: Open sky view; avoid obstructions.
- Cellular Signal: Ensure stable data transmission.
- EMI Mitigation: Distance from power stations/strong RF sources.
- Multipath Avoidance: Avoid GNSS positioning errors caused by the environment

3.2 Field Installation Preparation

Before installing a new station, perform the following checks:

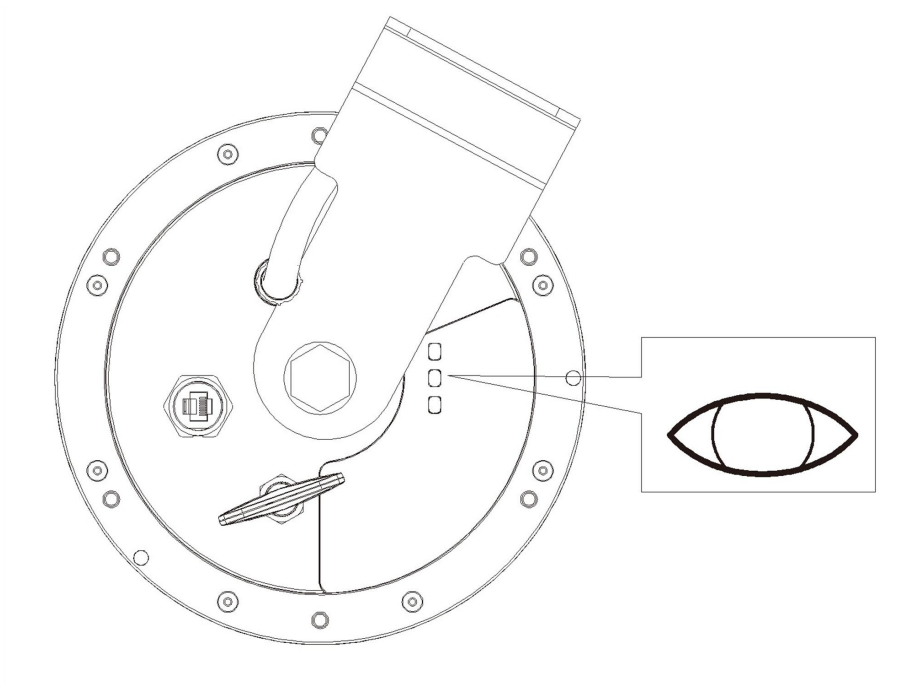
- Check materials to ensure nothing is missing.
- Connect cables and verify stable power supply.
- Test and validate to confirm strong on-site signals and proper monitoring station operation. Verification can be done via computer or mobile phone (either method is sufficient). Prerequisite for installation: Cellular 4G along with BDS, GPS, GLONASS, and Galileo satellite signal strengths must be at least "Strong".

3.3 To Install the Reference Station on the Bracket

Step 1: Put the reference station on the screw on the bracket.

Step 2: Turn the screw on the bracket until it stops and the screw touches the inner bottom of the reference station.

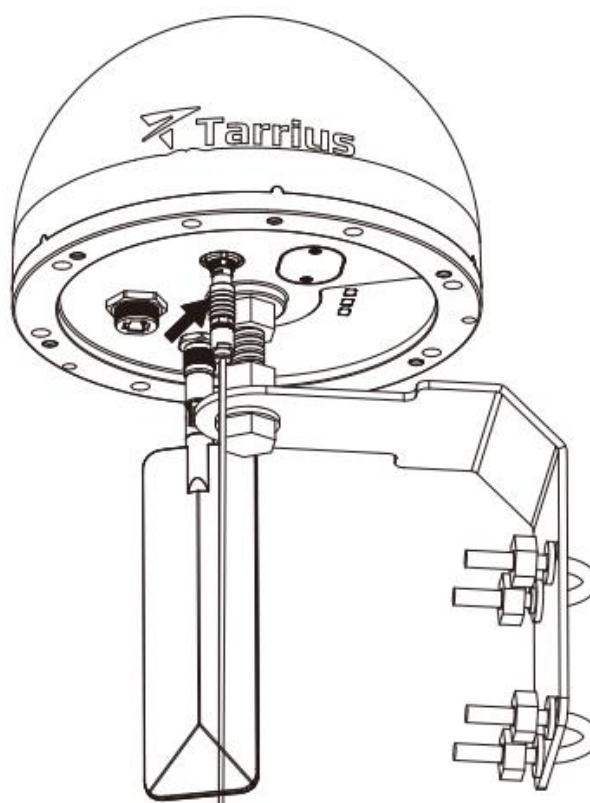
Step 3: Use a socket wrench to adjust the screw and nut to align the bracket. Make sure that you can see the LED indicators from the ground and that the adapter cable can be connected.



Step 4: Tighten the four fixing screws of the hard drive cover.

Step 5: Install the Sub-GHz antenna onto the antenna connector (optional).

Step 6: Connect the adapter cable to the reference station.

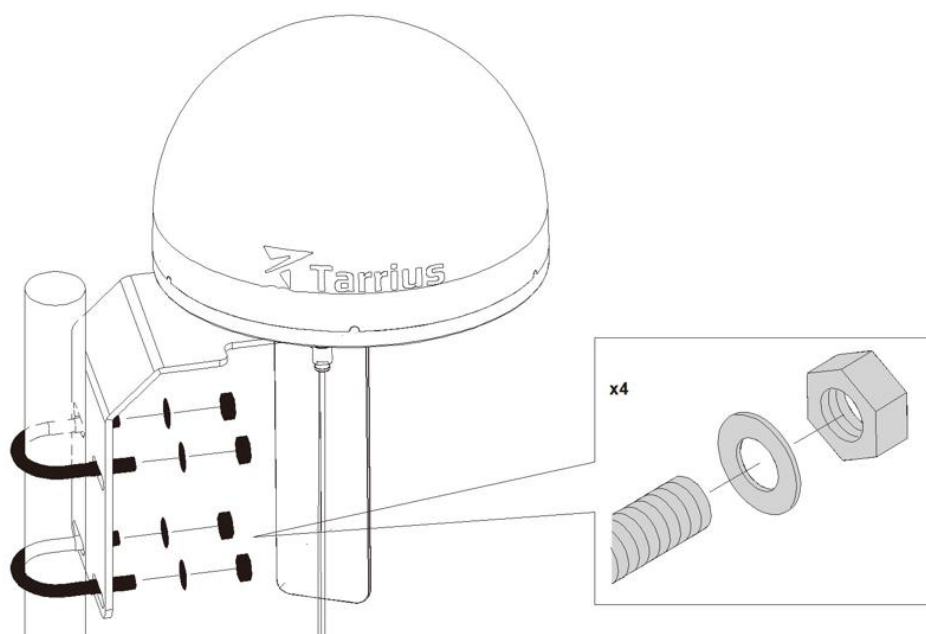


3.4 To Install the Reference Station on a Pole

Step 1: Attach the post tightly to a wall, roof top or the ground. Make sure that the post cannot move.

Step 2: Select the brackets of the appropriate size and put them around the post.

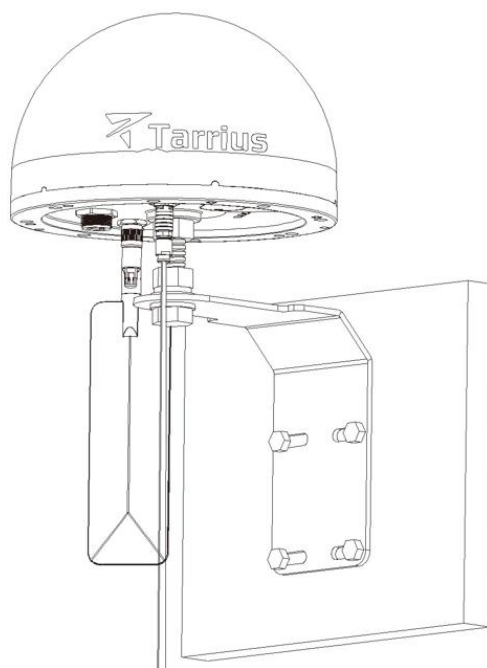
Step 3: Use 4 washers and 4 screws to attach the post brackets to the post.



- Step 4:** Connect the low-voltage cable to the adapter cable and the power supply.
- Step 5:** Attach the low-voltage cable to the post from the reference station to the power supply with cable ties.
- Step 6:** Install the Sub-GHz antenna onto the antenna connector (optional).
- Step 7:** Connect the power supply cable to a 100-240V power outlet. It is recommended that the PSU be installed indoors. Any PSU installed outdoors must be housed in a protective enclosure.
- Step 8:** Wait until the red and orange LED indicators are on. The blue LED indicator must flash for 3 seconds and then be off for 2 seconds.

3.5 To Install the Reference Station on a Wall

- Step 1:** Hold the arm for the reference station on the wall where you will attach it. Make 4 marks on the wall where you will attach 4 screws.



Step 2: Drill 4 holes in the wall for the 4 screws.

Step 3: Install the 4 screws into the holes in the wall.

Step 4: Connect the low-voltage cable to the adapter cable and the power supply.

Step 5: Attach the low-voltage cable to the wall from the reference station to the power supply with cable ties.

Step 6: Install the Sub-GHz antenna onto the antenna connector (optional).

Step 7: Connect the power supply cable to a 100-240V power outlet. It is recommended that the PSU be installed indoors. Any PSU installed outdoors must be housed in a protective enclosure.

Step 8: Wait until the red and orange indicators are on. The blue indicator must flash for 3 seconds and then be off for 2 seconds.

3.6 Post-Installation Verification

After the device is installed, check the device status to verify that the device is operating properly.

- LED indicators: Check the LEDs on the bottom of the device. Normally, the red and yellow LEDs remain steady on, and the blue LED blinks for 3 seconds and then remains steady on for 2 seconds.
- GNSS status: After the device starts up, access the local Web UI and check the GNSS status. Normally, Survey-In Progress is displayed as Completed, and the signal strength is displayed as Strong. For details, refer to Section 4.1.

NTRIP status: If NTRIP is configured, access the home page of the local Web UI and check the NTRIP connection status. Normally, the NTRIP connection status should indicate that the connection is established. For details, refer to Section 4.1.

4 Usage Instructions

4.1 Managing Device via Local WiFi Web UI

Devices can be managed through the Web UI, which requires the device's Wi-Fi or RJ45 functionality to be enabled.

Connecting via Wi-Fi:

Users can connect to the integrated GNSS receiver's Wi-Fi hotspot (Name: LR700A_DeviceSN; Initial Password: 12345678). Open the IP address 192.168.1.1 in a browser on your PC. Users will be required to change the password mandatorily upon first login. After setting a password that meets the requirements, click "Submit" to complete the password change. The device will then restart automatically. Wait for the device to restart, connect to the Wi-Fi hotspot with the new password, then enter the IP address again in your browser to access the Web UI interface.

Please change the WiFi hotspot password

* Wi-Fi password

Submit

Connecting via RJ45: Connect the device to a PC or router using an Ethernet cable.

- By default, the RJ45 port uses a static IP: 192.168.10.100. Access this address 192.168.10.100 directly via a browser.
- If DHCP is enabled, first, connect via Wi-Fi to check the RJ45-assigned IP address in the Web UI (e.g., 192.168.33.100). Then enter this IP address in the browser to access the interface. If this is your first login, you will also need to change the password by following the same steps as the first login via the Wi-Fi hotspot.

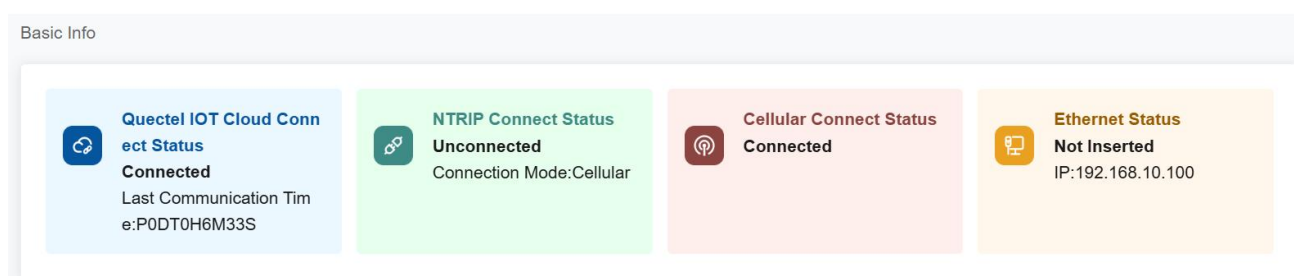
After opening the Web UI, you will see the following sections: Basic Information, Configuration, Diagnosis, Data Download, Firmware Management, and System:

- Basic Information: Provides a dashboard displaying device status.
- Configuration: Allows viewing device settings and issuing control commands (e.g., setting work modes).
- Diagnosis: Includes network diagnostics and device self-check functions.

- Data Download: Enables downloading device data such as RTCM files and logs.
- Firmware Management: Supports firmware upgrades.
- System: Displays device system details and allows operations like rebooting or restoring factory settings.

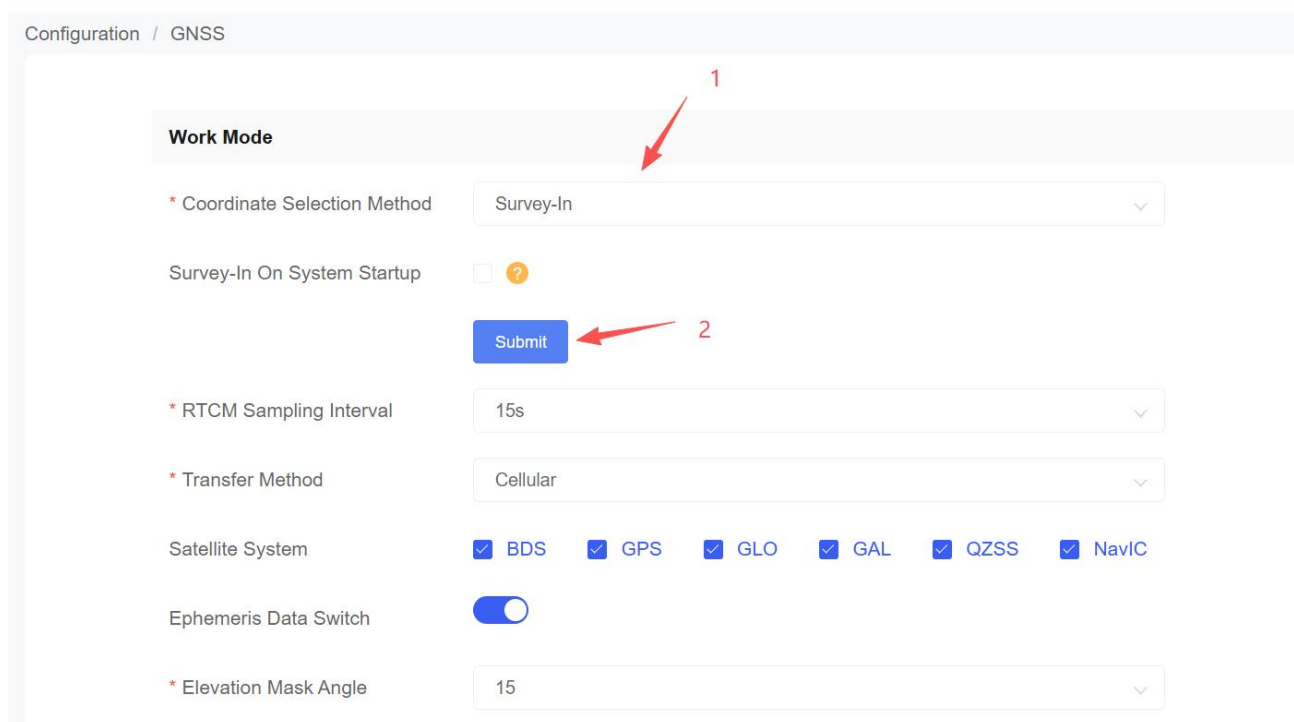
4.1.1 Getting Started

- Log in to the WebUI. On the home page, check whether the device is connected to the cloud platform. Alternatively, you can determine the connection status by checking the cellular signal indicator.



- Configure GNSS by performing SVIN or manually entering precise coordinates. Return to the home page to check the device positioning status and view the SVIN progress. Once the Survey-In process is complete, RTCM data becomes available for use.

LR700A



4.1.2 Detailed Information

After opening the Web UI, you will see the following sections: Basic Information, Configuration, Diagnosis,

Data Download, Firmware Management, and System:

- Basic Information: Provides a dashboard displaying device status.
- Configuration: Allows viewing device settings and issuing control commands (e.g., setting work modes).
- Diagnosis: Includes network diagnostics and device self-check functions.
- Data Download: Enables downloading device data such as RTCM files and logs.
- Firmware Management: Supports firmware upgrades.
- System: Displays device system details and allows operations like rebooting or restoring factory settings.

Basic Info

**Quetcet IOT Cloud Connect Status**
Connected
Last Communication Time: P0DT0H2M36S

**NTRIP Connect Status**
Unconnected
Connection Mode: Cellular

**Cellular Connect Status**
Connected

GNSS

Work Mode	Base Station	Height	114.537
GNSS Time	2026-08-19T09:22:00Z	Latitude	30.49104798
Coordinate Mode	Survey-In	Longitude	114.50118945
Survey-In Progress	51%	PDOP	2.2

Satellite List

Index	SV	Elevation (deg)
1	C1	44
2	C2	39

- Configure the NTRIP Caster parameters, and then return to the home page to check the NTRIP connection status. After connecting to the NTRIP Caster, the base station can transmit correction data to the NTRIP Caster.

Configuration / NTRIP

Connect to Caster ServiceEnable ☒Encryption Mode ☐ TLS

* Protocol Version V2.0

* IP caster.quectel.com

* Port 12102

* User Name quectel

* Password *****

* Mount Point LR700A_E1Y25IG54000100

Submit

- If correction data is transmitted through the Sub-GHz module, ensure that the rover and base station are configured with the same Preamble ID.

LR700A

Configuration / Network

Submit

WIFI ?

* Mode AP

* SSID LR700A_E1Y25IG54000100

* Password *****

IP 192.168.1.1

Submit

Sub-GHz ?Transmission Enable ☒

Calibration 0

Repeater Mode Enable ☐

* Preamble 5

Submit

4.1.2.1 Basic Information Overview

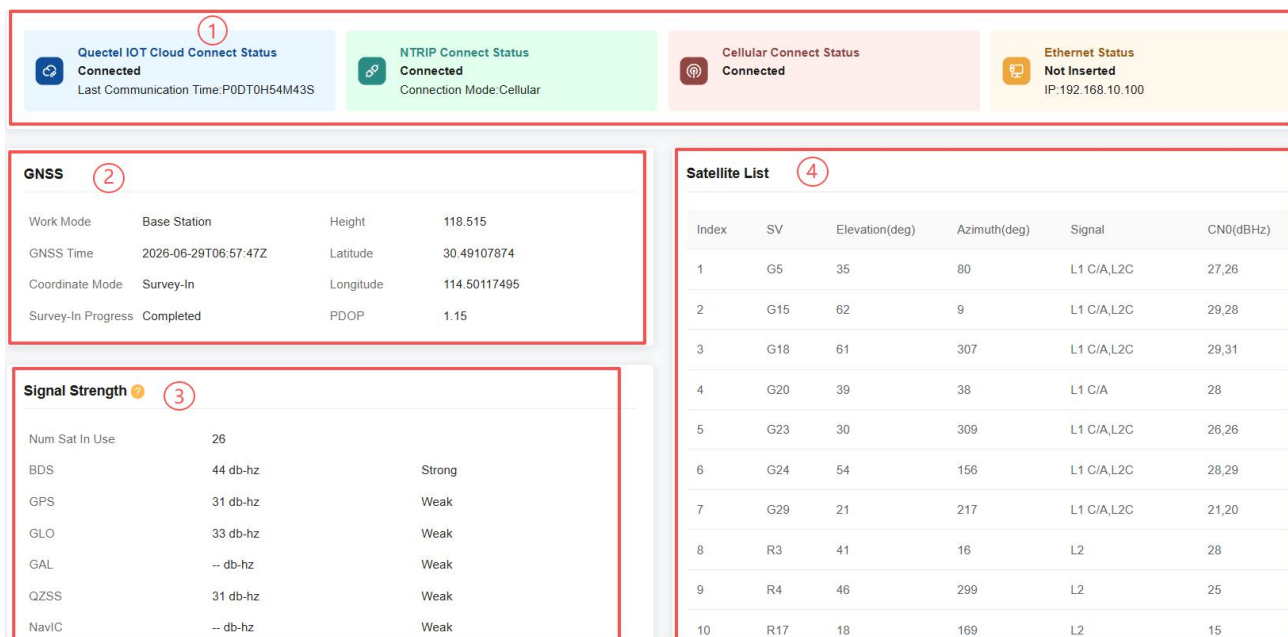


Figure 6: Basic Info

1. Displays the current connection status of the cloud platform, NTRIP service, cellular network, and Ethernet.
2. Displays basic GNSS information, including work mode, GNSS time, coordinate mode, survey-in progress, height, latitude, longitude, and PDOP.
3. Displays GNSS signal strength information, including the number of satellites in use and the signal strength of each satellite system.
4. Displays the list of currently visible GNSS satellites, including satellite ID, elevation, azimuth, signal type, and C/N0.

4.1.2.2 GNSS Configuration

Configuration / GNSS

Work Mode

* Coordinate Selection Method Survey-In

Survey-In On System Startup ☒ ?

Submit

* RTCM Sampling Interval 15s

* Transfer Method Cellular

Satellite System ☒ BDS ☒ GPS ☒ GLO ☒ GAL ☒ QZSS ☒ NavIC

Ephemeris Data Switch ☒

* Elevation Mask Angle 15

RTCM Data Format MSM4

Submit

Figure 7: GNSS Configuration

This page is used to configure GNSS working parameters.

- Coordinate Selection Method: Selects the coordinate selection method for the device. Two methods are available: Survey-In and Manual Input.
- RTCM Sampling Interval: Sets the sampling interval for RTCM data.
- Transfer Method: Selects the RTCM data transfer method.
- Satellite System: Enables or disables supported satellite systems, including BDS, GPS, GLO, GAL, QZSS, and NavIC.
- Ephemeris Data Switch: Enables or disables ephemeris data output.
- Elevation Mask Angle: Sets the minimum satellite elevation angle used for GNSS positioning.
- RTCM Data Format: Selects the RTCM data format. Available options include MSM3, MSM4, MSM5, MSM6, and MSM7.

4.1.2.3 NTRIP Configuration

Configuration / NTRIP

Connect to Caster Service

Enable

☒

Encryption Mode

☐ TLS

* Protocol Version

V2.0

* IP

caster.quectel.com

* Port

12102

* User Name

quectel

* Password

* Mount Point

LR700A_E1Y25IG54000100

Submit

Figure 8: NTRIP Configuration

This page is used to configure NTRIP working parameters.

- **Enable:** Enables or disables the connection to the Caster service.
- **Encryption Mode:** Specifies whether encryption is used for the connection.
- **Protocol Version:** Specifies the NTRIP protocol version used to connect to the Caster service.
- **IP:** The IP address or domain name of the Caster server.
- **Port:** The port number of the Caster server.
- **User Name:** The user name used for authentication when connecting to the Caster service.
- **Password:** The password used for authentication when connecting to the Caster service.
- **Mount Point:** The mount point on the Caster server where the device uploads differential correction data. Rovers can receive correction data by connecting to this mount point.

4.1.2.4 Sub-GHz Configuration

Configuration / Network

Submit

WIFI ?

* Mode * SSID

* Password IP

Submit

Sub-GHz ?

Transmission Enable ☒ Calibration

Repeater Mode Enable ☐ * Preamble

Submit

This page is used to configure Sub-GHz working parameters.

- Transmission Enable: Enable/disable Sub-GHz data transmission.
- Calibration: Calibration parameters of the Sub-GHz module. This value is read-only.
- Repeater Mode Enable: Enable or disable repeater mode for the Sub-GHz module. When disabled, the module operates in master mode.
- Preamble: The preamble ID for which the device communicates. Only devices with matching preamble IDs and network IDs can communicate with each other.

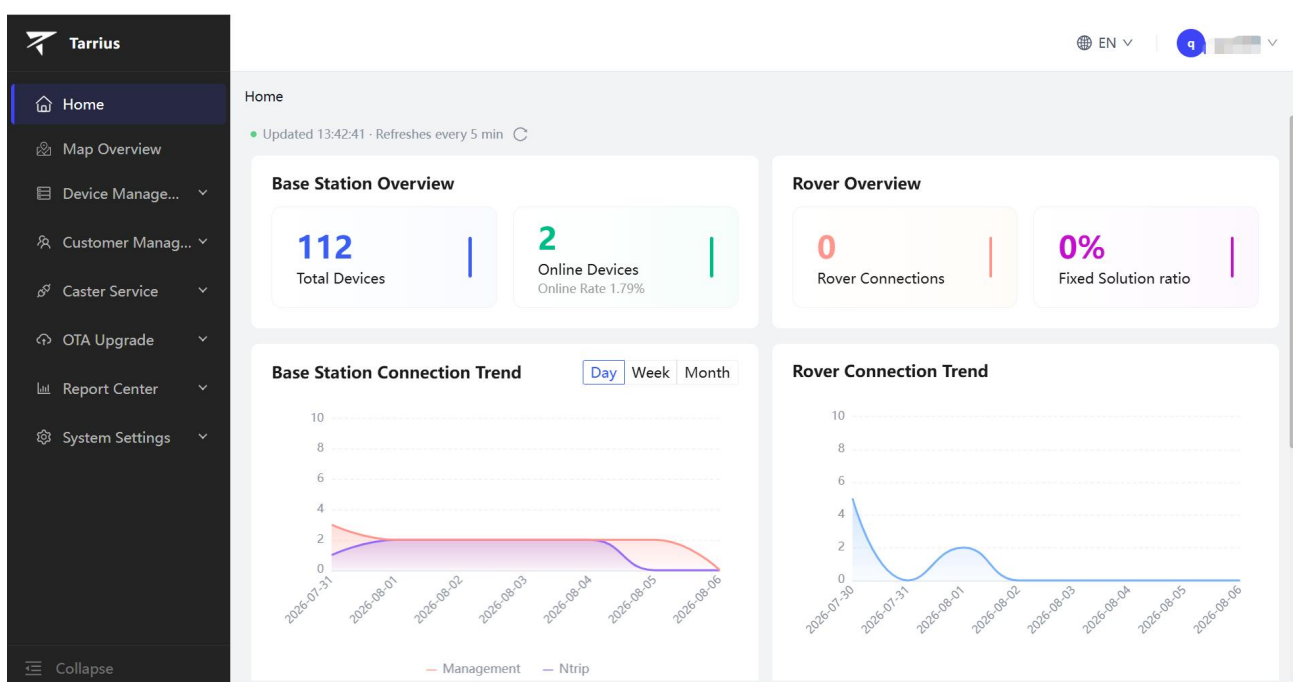
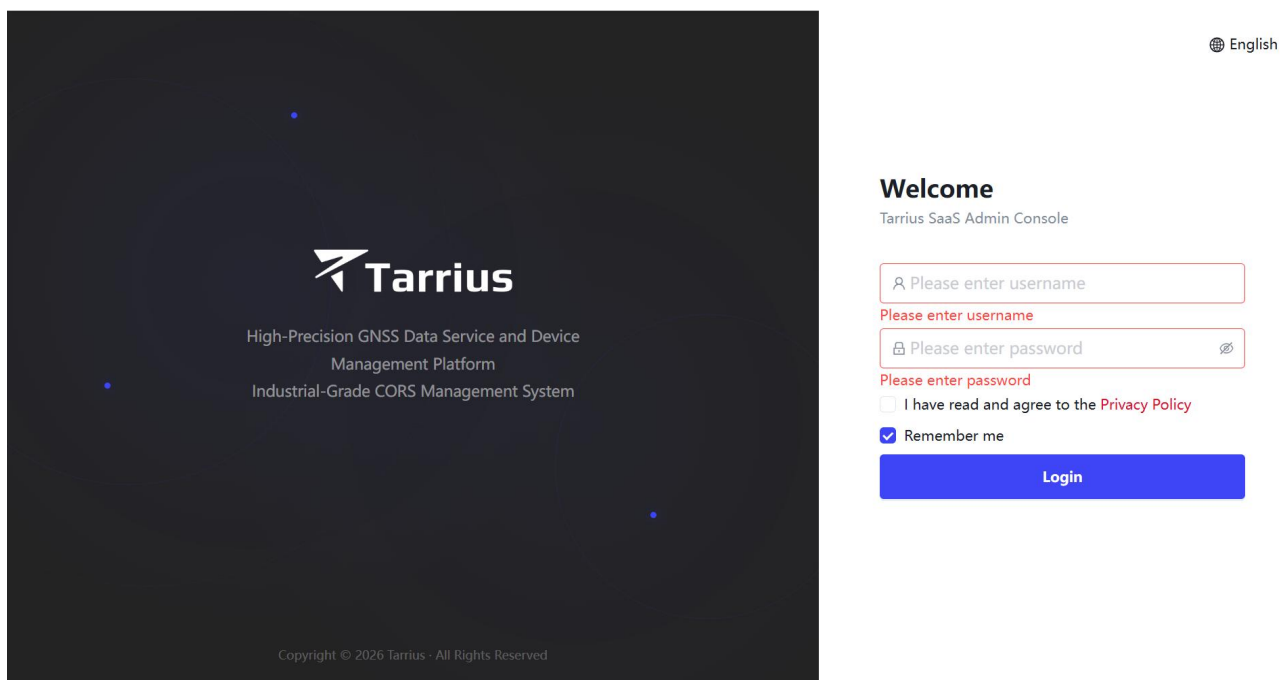
4.2 Managing Devices via Remote Cloud IoT Platform

Devices can be managed through the IoT platform. This method requires users to insert a valid SIM card (some SIMs may require APN configuration) and ensure the device can successfully establish network connectivity.

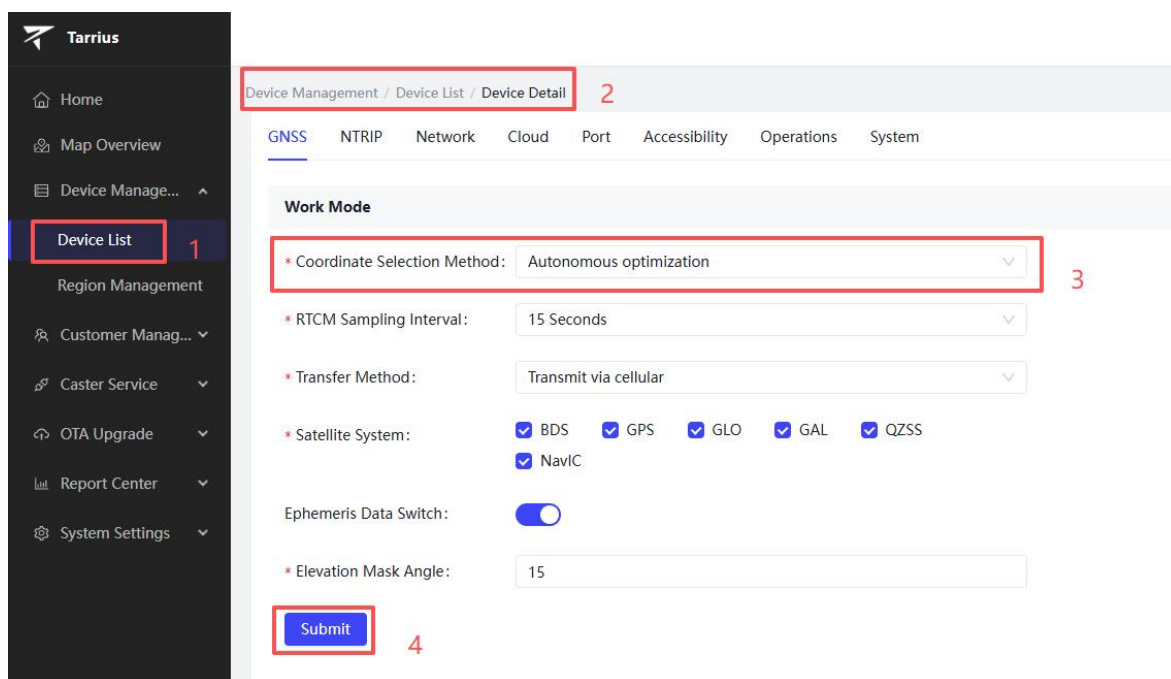
Users can manage connected integrated GNSS receiver devices through the IoT Platform. This platform provides operational capabilities for connected users, enhancing digital operation efficiency. Access the platform via a PC browser at <https://caster.quectel.com/> and log in using your account and password.

4.2.1 Getting Started

- Log in to the management platform. On the home page, view an overview of the current connection status of all devices.



- On the Device Management > Device Details page, configure GNSS by performing SVIN or manually entering precise coordinates. Once the Survey-In process is complete, RTCM data becomes available for use.



Device Management / Device List / Device Detail 2

GNSS NTRIP Network Cloud Port Accessibility Operations System

Work Mode

* Coordinate Selection Method: Autonomous optimization 3

* RTCM Sampling Interval: 15 Seconds

* Transfer Method: Transmit via cellular

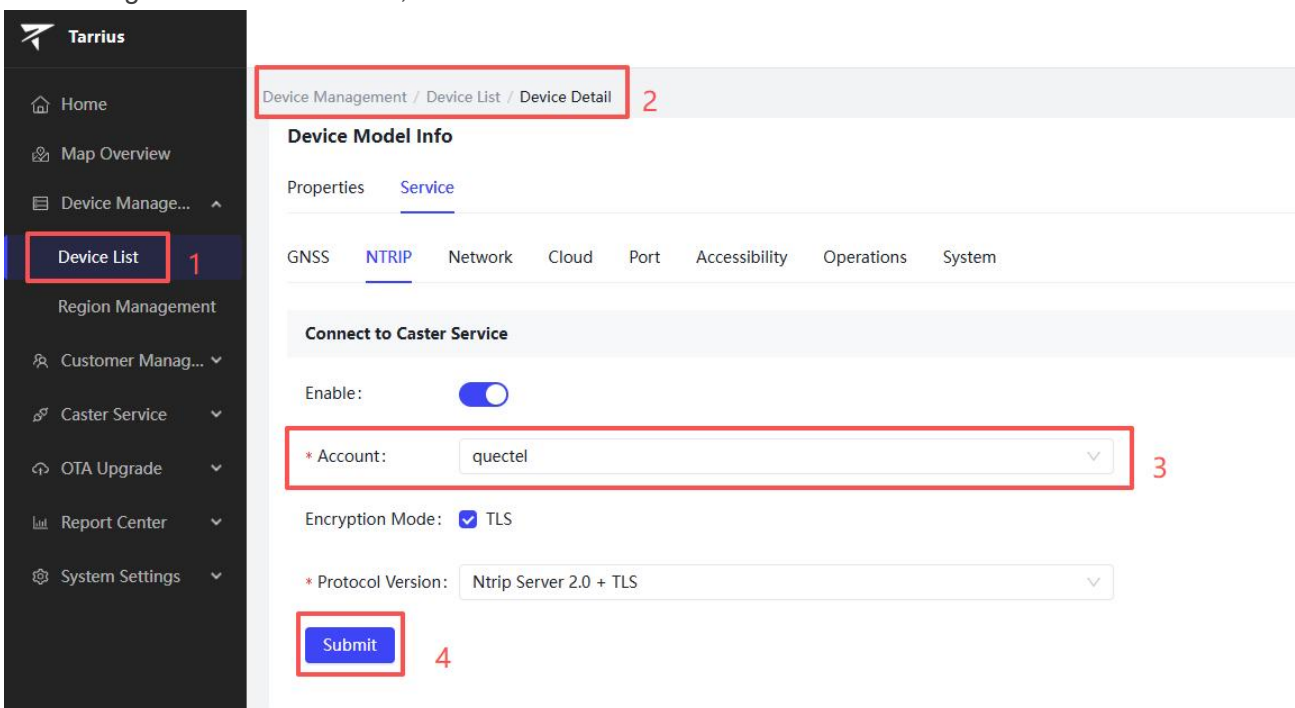
* Satellite System: ☒ BDS ☒ GPS ☒ GLO ☒ GAL ☒ QZSS ☒ NavIC

Ephemeris Data Switch: ☒

* Elevation Mask Angle: 15

Submit 4

- Configure the NTRIP Caster parameters, and then check the NTRIP connection status. After connecting to the NTRIP Caster, the base station can transmit correction data to the NTRIP Caster.



Device Management / Device List / Device Detail 2

Device Model Info

Properties Service

GNSS NTRIP Network Cloud Port Accessibility Operations System

Connect to Caster Service

Enable: ☒

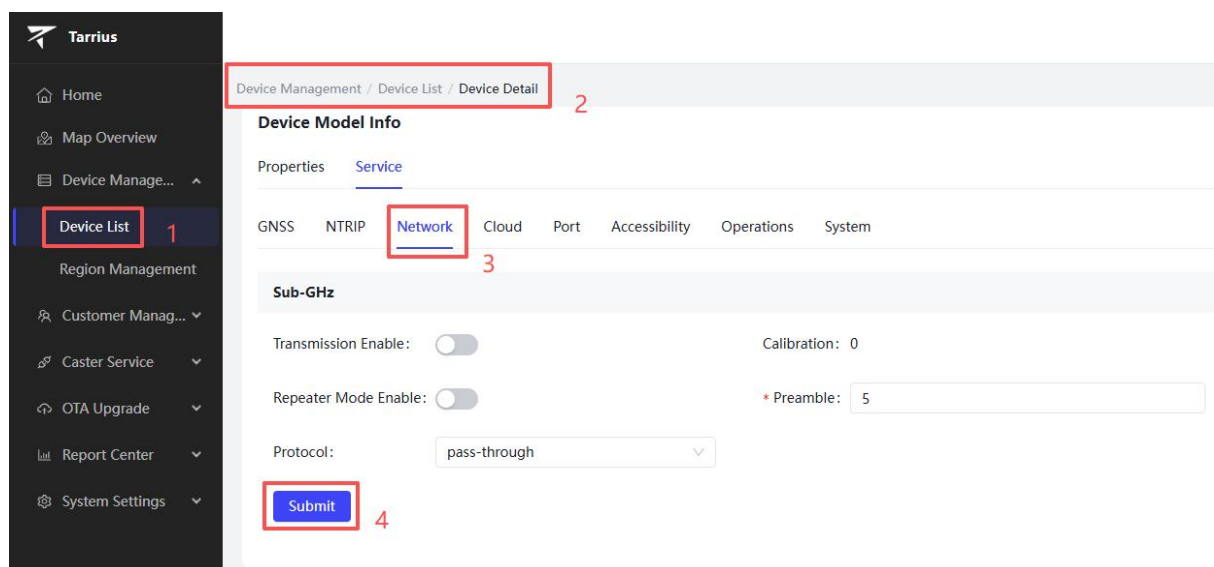
* Account: quectel 3

Encryption Mode: ☒ TLS

* Protocol Version: Ntrip Server 2.0 + TLS

Submit 4

- If correction data is transmitted through the Sub-GHz module, ensure that the rover and base station are configured with the same Preamble ID.



4.2.2 Detailed Information

After logging in, the platform displays three sections:

- Home: Visualizes aggregated device data and connection trend.
- Map Overview: Displays the device location on the map and allows users to view basic device information.
- Device Management: View real-time device status and issue control commands (e.g., configure operational modes).
- Caster Service: Rover connection details and NTRIP account management.

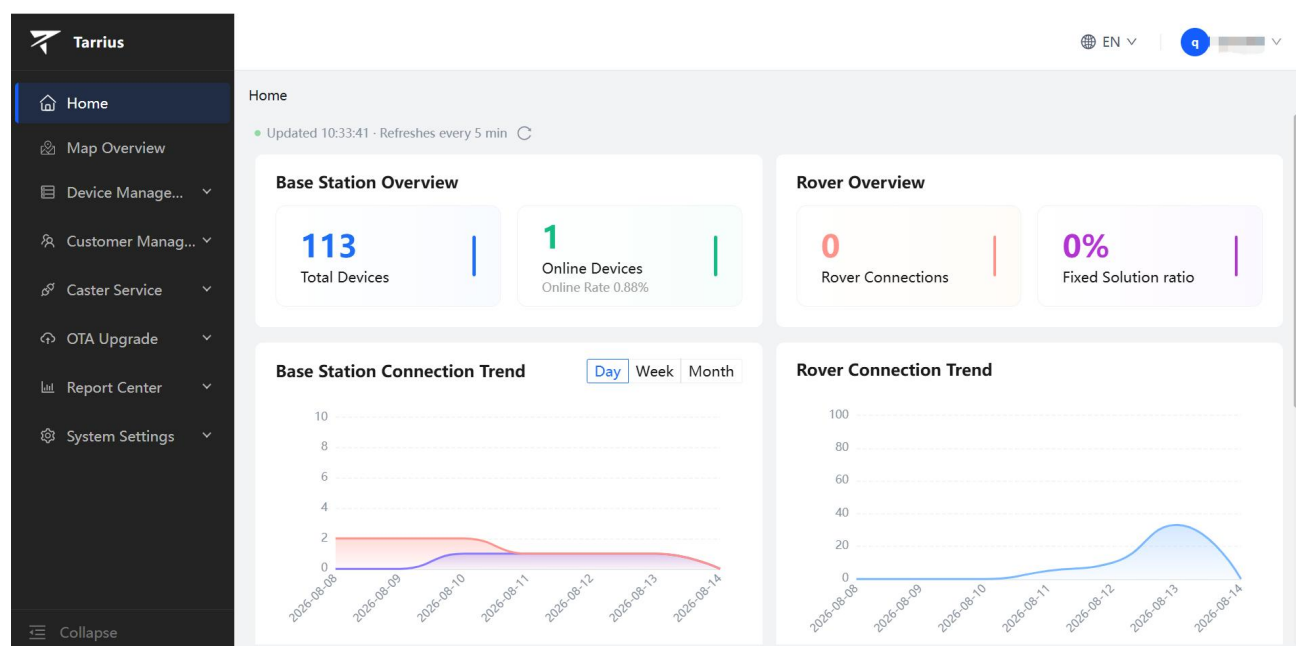


Figure 9: Home

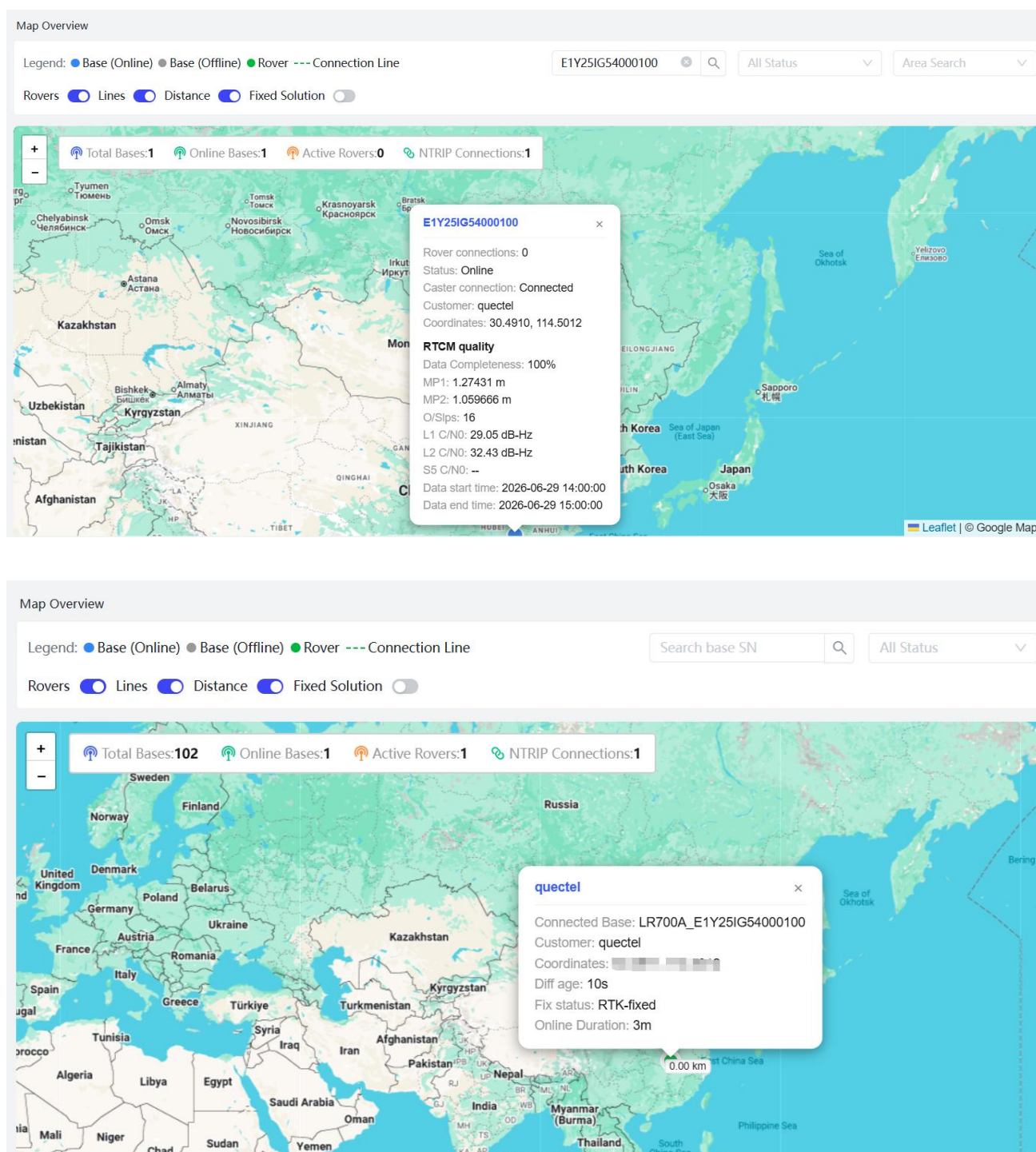


Figure 10: Map Overview

4.2.2.1 Device Management

Click “**Device List**” under “**Device Management**” to access the device list page. Select a device and click “**Details**” to enter its details page.

The device details page includes the following sections:

- **Device Information:** Displays basic device details.

Device Management / Device List / Device Detail

← Back

Station Info

Station SN	E1Y25IG54000100	Status	Online	Customer	quectel	Region (Editable)	Select region ▼
Firmware Version	LR700A00AANR01A02_BETA0320	IoT Device ID	869387062074753		Longitude	114.5012021	
Latitude	30.491041	Last Heartbeat	2026-06-29 16:13:58				

TEQC Data Overview

2026-06-29 15:00:00 – 2026-06-29 16:00:00

L1 C/N0 28.74 dB-Hz	L2 C/N0 30.88 dB-Hz	S5 C/N0 --	Data Completeness 100 %	MP1 1.659993 m
MP2 1.461072 m	O/Sips 27			

- **Device Property:** Shows thing model properties reported by the device.

Device Management / Device List / Device Detail

Device Model Info

Properties Service

Self Check Basic Information Device Status Port Configuration General Settings Base Station

Firmware version number LR700A00AA...	IMSI of current simcard 46002427337...	Sequence B200	Equipment SN Number E1Y25IG5400...	Hardware mainboard n... --	International Mobile Eq... 86938706207...
Operators of external SI... CHINA MOBILE	Card number of the ext... 898602C2177...	Model of cellular module EG25-GL	Firmware version of cell... --	Model of GNSS module LG290P03AA	Firmware version of GN... LG290P03AA...
Model of WIFI module FGM842D	Firmware version of WIF... FGM842DAA...	Model of WEBUI module LR7000A_WE...	Firmware version of WE... LR700A_WEB_...	TF card status FR_OK	Total capacity of TF card 15191
Remaining capacity of T... 14827					

- **Service:** Lists all services defined in the thing model of the device's product, enabling service commands to be issued to the device.

Device Management / Device List / Device Detail

Device Model Info

Properties Service

GNSS NTRIP Network Cloud Port Accessibility System

Work Mode

* Coordinate Selection Method:

* RTCM Sampling Interval:

* Transfer Method:

* Satellite System: ☒ BDS ☒ GPS ☒ GLO ☒ GAL ☒ QZSS
☒ NavIC

Ephemeris Data Switch: ☒

* Elevation Mask Angle:

4.2.2.1.1 GNSS Configuration

Device Management / Device List / Device Detail

Device Model Info

Properties Service

GNSS NTRIP Network Cloud Port Accessibility System

Work Mode

* Coordinate Selection Method:

* RTCM Sampling Interval:

* Transfer Method:

* Satellite System: ☒ BDS ☒ GPS ☒ GLO ☒ GAL ☒ QZSS
☒ NavIC

Ephemeris Data Switch: ☒

* Elevation Mask Angle:

This page is used to configure GNSS working parameters.

- Coordinate Selection Method: Selects the coordinate selection method for the device. Two methods are available: Survey-In and Manual Input.
- RTCM Sampling Interval: Sets the sampling interval for RTCM data.

- Transfer Method: Selects the RTCM data transfer method.
- Satellite System: Enables or disables supported satellite systems, including BDS, GPS, GLO, GAL, QZSS, and NavIC.
- Ephemeris Data Switch: Enables or disables ephemeris data output.
- Elevation Mask Angle: Sets the minimum satellite elevation angle used for GNSS positioning.

4.2.2.1.2 NTRIP Configuration

Device Management / Device List / Device Detail

GNSS **NTRIP** Network Cloud Port Accessibility System

Connect to Caster Service

Enable: ☒

Encryption Mode: ☐ TLS

* Protocol Version: Ntrip Server 2.0

* IP: caster.quectel.com

* Port: 12102

* User Name: quectel

* Password: 

* Mount Point: LR700A_E1Y25IG54000100

Submit

This page is used to configure NTRIP working parameters.

- Enable: Enables or disables the connection to the Caster service.
- Encryption Mode: Specifies whether encryption is used for the connection.
- Protocol Version: Specifies the NTRIP protocol version used to connect to the Caster service.
- IP: The IP address or domain name of the Caster server.
- Port: The port number of the Caster server.
- User Name: The user name used for authentication when connecting to the Caster service.
- Password: The password used for authentication when connecting to the Caster service.
- Mount Point: The mount point on the Caster server where the device uploads differential correction data. Rovers can receive correction data by connecting to this mount point.

4.2.2.1.3 Sub-GHz Configuration

Device Management / Device List / Device Detail

Rover Data Statistics

Rover Online Connections
0

Total Sent
9.52 MB

Device Model Info

Properties Service

GNSS NTRIP Network Cloud Port Accessibility System

Sub-GHz

Transmission Enable: ☐

Calibration: --

Repeater Mode Enable: ☐

* Preamble:

Submit

This page is used to configure Sub-GHz working parameters.

- Transmission Enable: Enable/disable Sub-GHz data transmission.
- Calibration: Calibration parameters of the Sub-GHz module. This value is read-only.
- Repeater Mode Enable: Enable or disable repeater mode for the Sub-GHz module. When disabled, the module operates in master mode.
- Preamble: The preamble ID for which the device communicates. Only devices with matching preamble IDs and network IDs can communicate with each other.

4.2.2.2 Caster Service

The platform provides a Caster service for distributing differential correction data to rover stations.

4.2.2.2.1 Rover Connection Monitor

This page displays the rover status, including position, positioning status, and other related information.

Caster Service / Rover Connection Monitor

Auto Refresh 10s

1
Total Connections

1
Active Licenses

1
Number of connected
caster base stations

0
Banned IPs

Search by license username All Status

License Username	Status	Base Station	Rover Position	Fix status	Diff age	Duration	Connected At	Action
quectel	Streaming	LR700A_E1Y25IG54...	3, 1	RTK-floated	4s	17s	2026-06-29 17:24:15	Detail Disconnect
quectel	Disconnected	LR700A_E1Y25IG54...		RTK-fixed	10s	21m	2026-06-29 16:31:09	Detail
quectel	Disconnected	LR700A_E1Y25IG54...		Autonomous...	--	4s	2026-06-29 16:31:01	Detail
quectel	Disconnected	--	--	--	--	21s	2026-06-29 16:26:59	Detail
quectel	Auth Failed	--	--	--	--	0s	2026-06-29 16:25:27	Detail
quectel	Disconnected	LR700A_SN202605...		Autonomous...	--	34s	2026-06-26 09:03:02	Detail

4.2.2.2 NTRIP Account Management

This page displays the number and validity period of the current NTRIP accounts.

Caster Service / NTRIP Account Management

Please Enter License Code All Status Customer

Username	Status	Customer	Max Connections	Connections	Valid Period
quectel	In Use	quectel	1000	0	Unlimited

4.2.2.3 Report Center

This page displays analysis reports generated from the data uploaded by the base station.

Report Center / Report List

Report Type Mountpoint

Time Range	Status
2026-06-29 14:00 - 17:00	• SUCCESS
2026-06-18 13:00 - 16:00	• SUCCESS

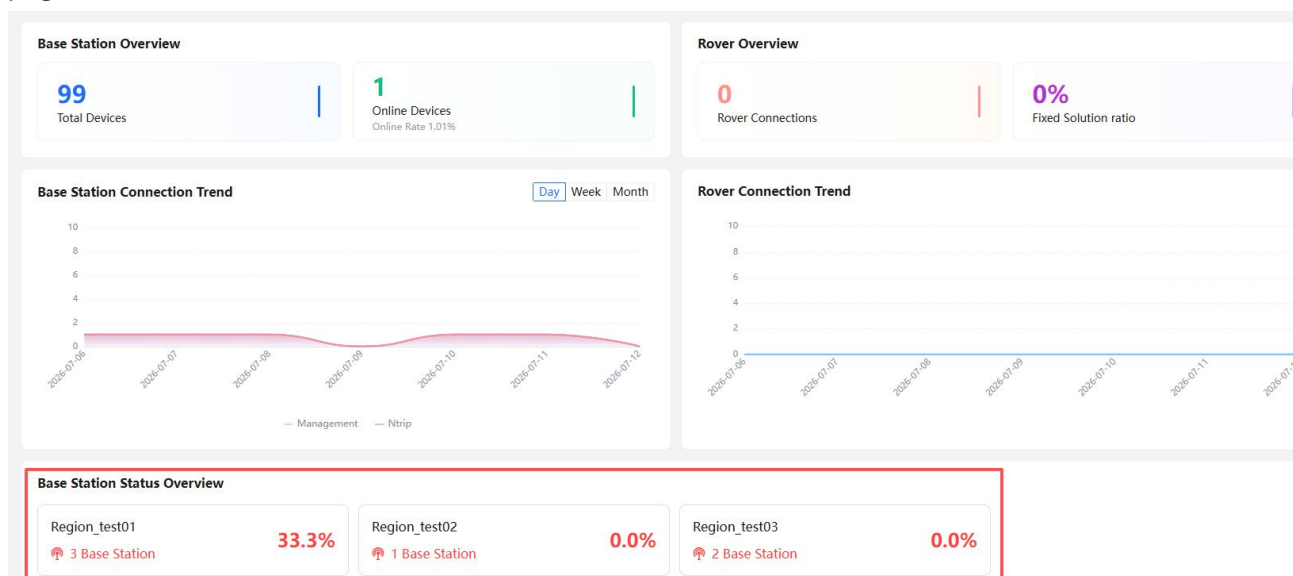
× RTCM Quality — 2026-06-29 14:00 - 17:00

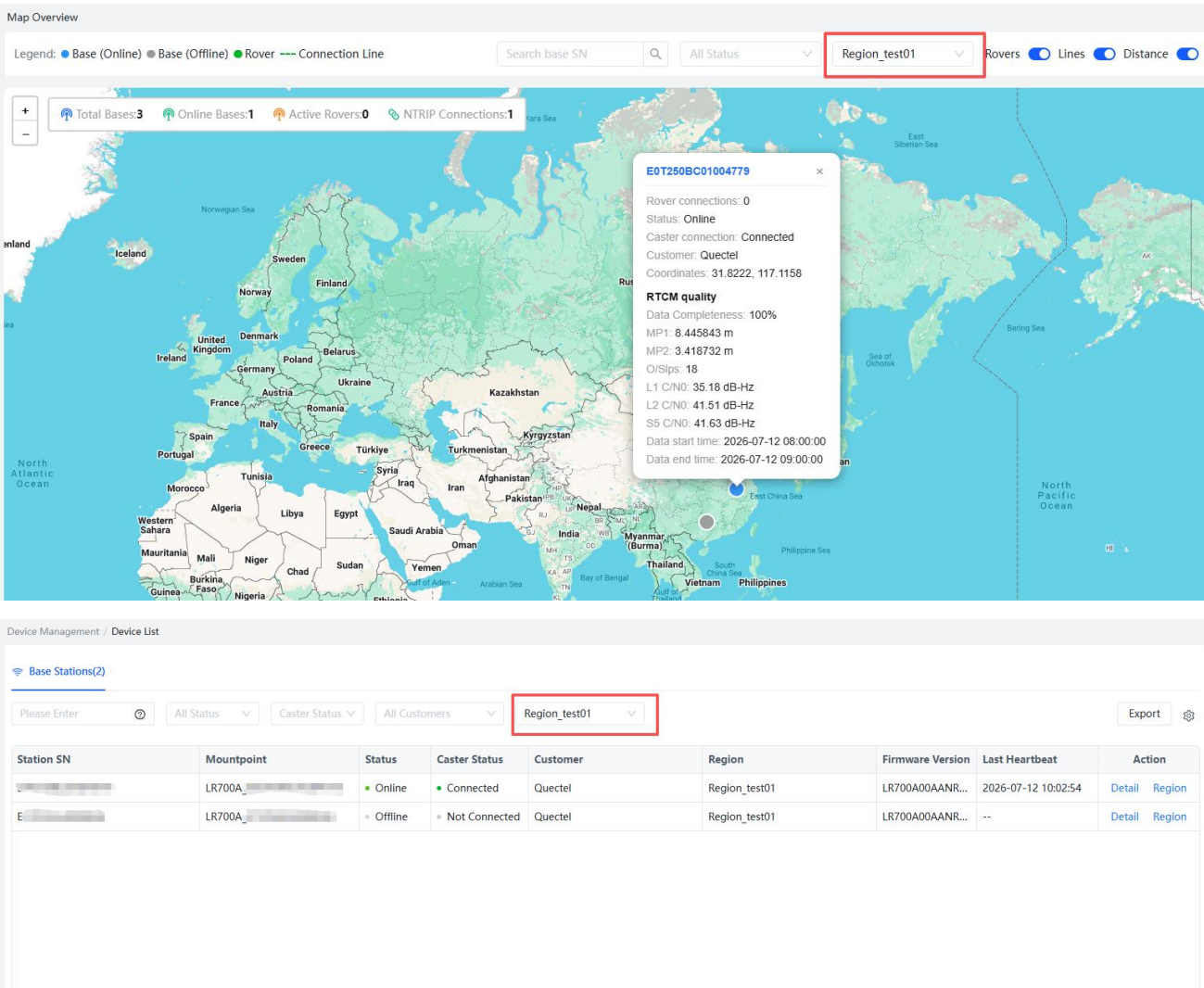
Data Completeness(%)	Cycle Slip Ratio(o/slps)	MP1(m)	MP2(m)	SNR S1(dB-Hz)	Action
100.00	16	1.274310	1.059666	29.05	Download RTCM
100.00	27	1.659993	1.461072	28.74	Download RTCM
100.00	24	1.272530	1.566307	28.40	Download RTCM

[Export Excel](#)
[Export CSV](#)

4.2.2.4 Region Management

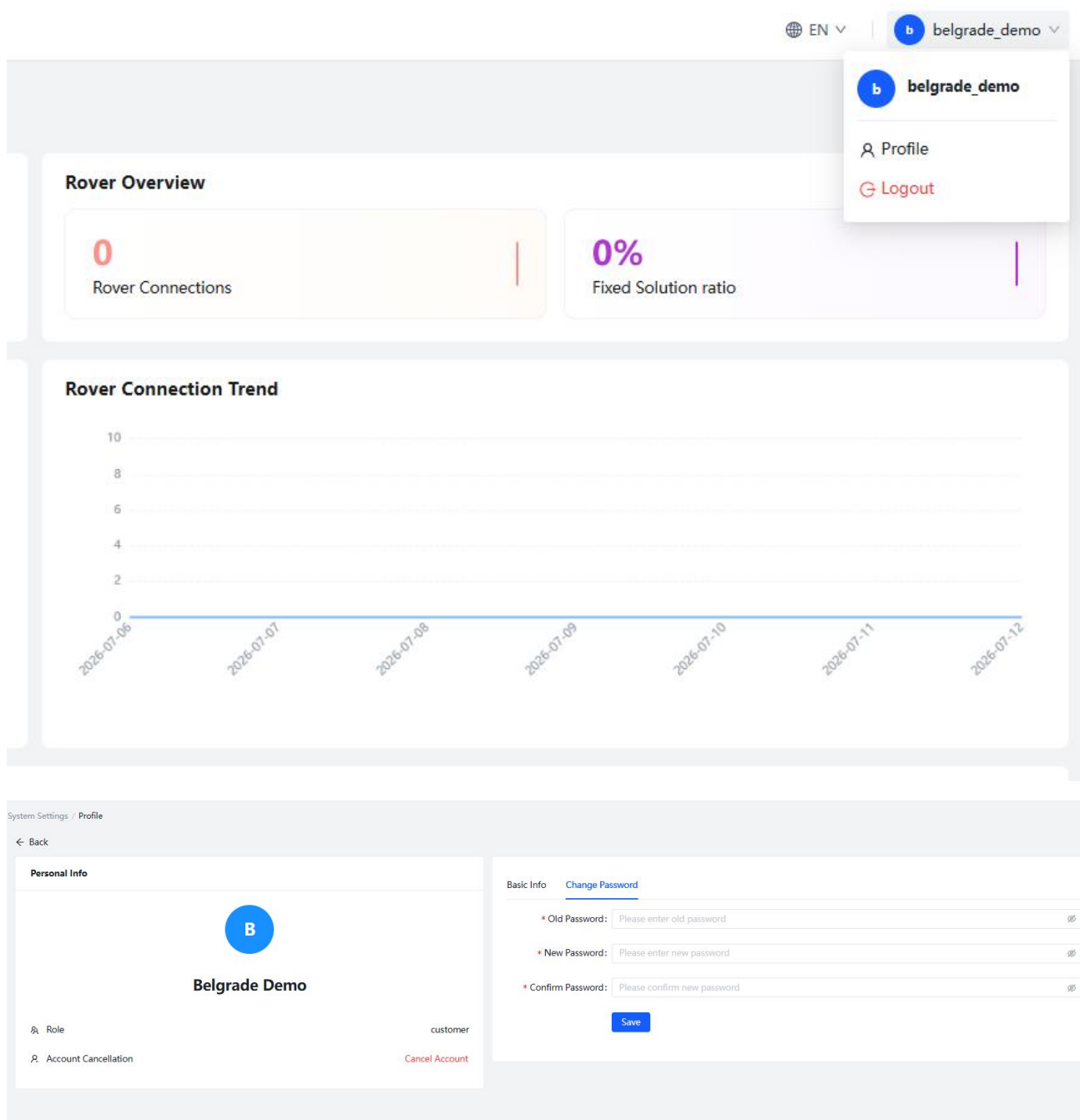
Users can manage areas and assign devices to specific areas. Once devices are associated with an area, users can conveniently view area-related device information on the Dashboard, Map, and Device List pages.





4.2.2.5 Profile

Users can change their password on the Profile Management page.

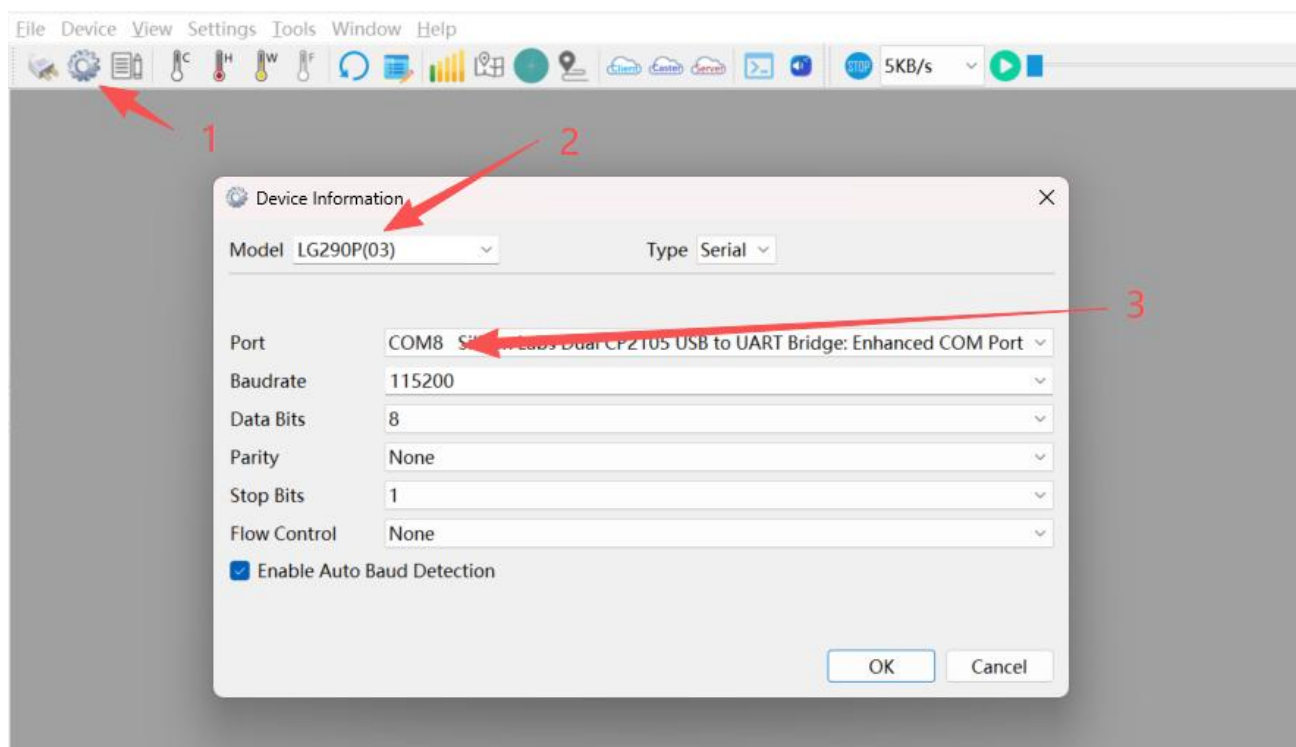


4.3 Rover Obtaining Correction Data

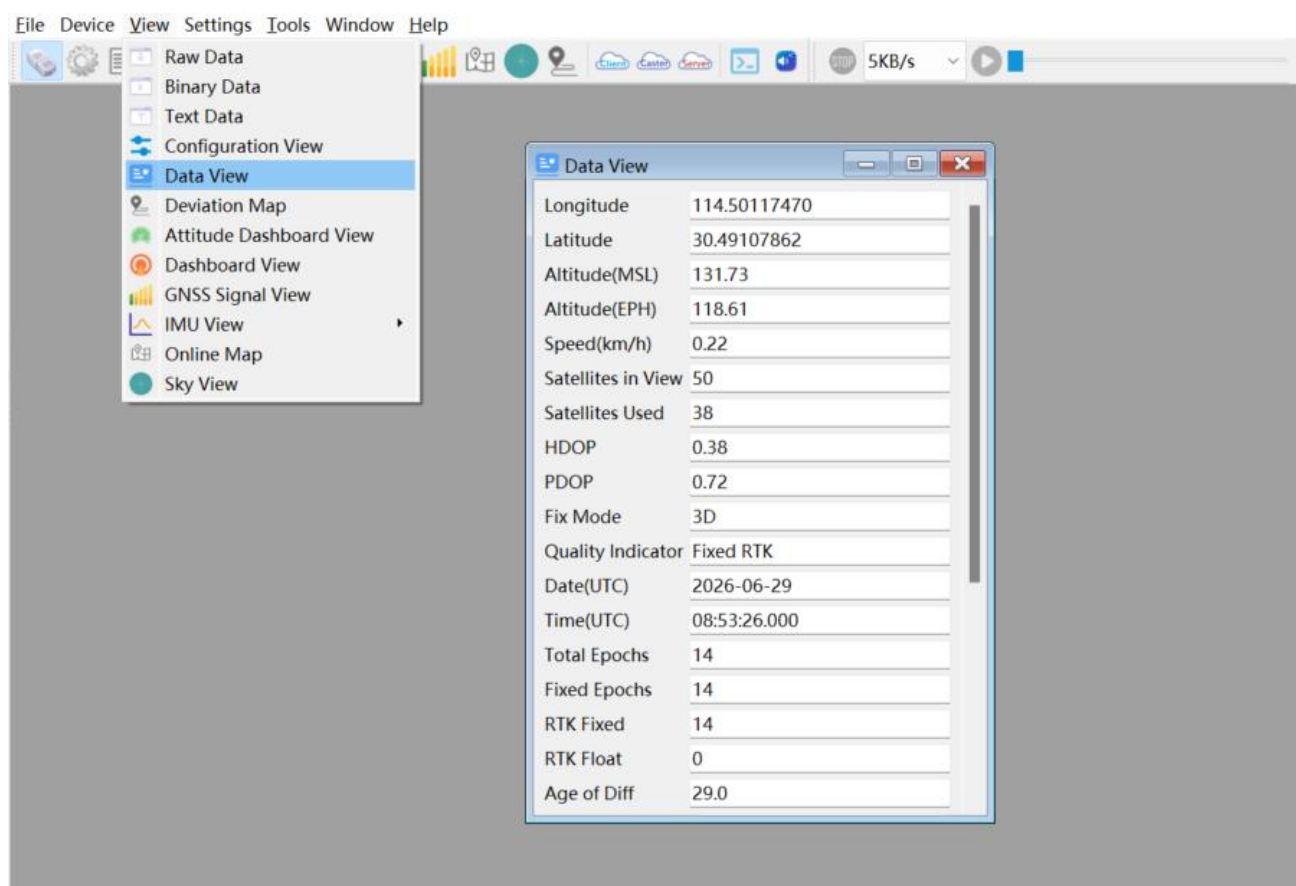
4.3.1 Rover Obtaining Correction Data via Network

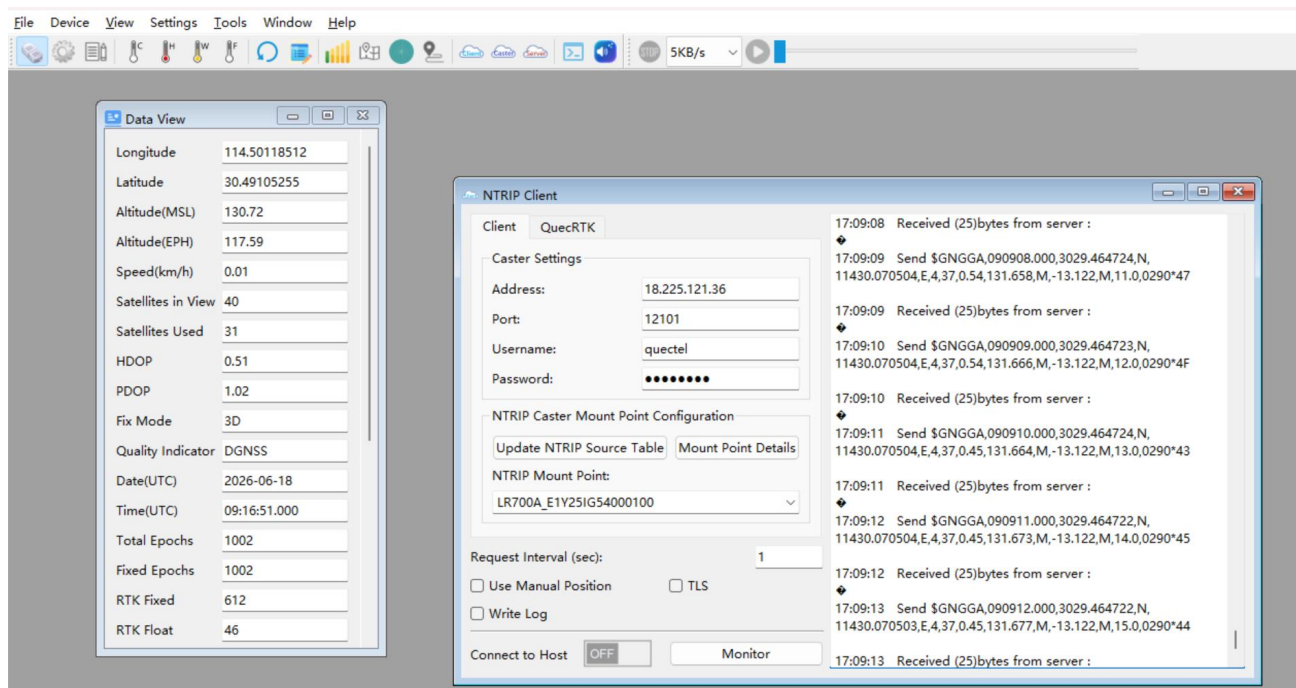
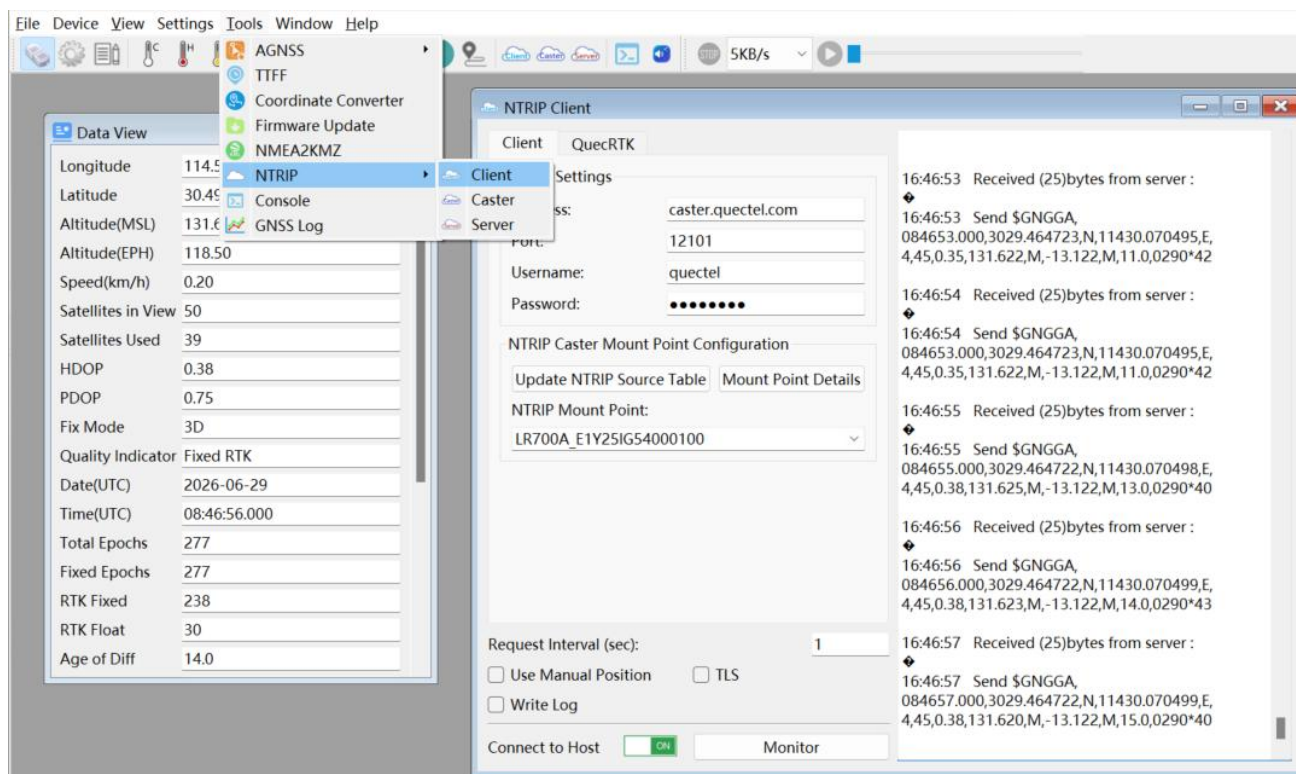
First, prepare a GNSS module that supports RTK functionality, such as Quectel's LG290P. Connect the module to the computer, and then use the NTRIP Client function of the QGNSS tool.

- Open the QGNSS tool and select the LG290P module.



- View Click the View menu and select Data View; then click the Tools menu and select NTRIP Client. Enter the NTRIP account, password, caster address, port, and mount point, and finally click Connect to Host.





- Observe the values of RTK Fixed and RTK Float.

5 Troubleshooting

Table 3: Troubleshooting

No.	Fault	Troubleshooting
1	All LEDs are off	Verify power supply (9–36V DC); check cable continuity.
2	Blue LED flashes once every 5 s	Ensure clear sky view; relocate if obstructions exist.
3	Orange LED is off	Confirm Nano-SIM activation (data plan required); validate cellular coverage.
4	Base station fails to connect to Caster service	Check Nano SIM card (which must have data traffic function); confirm the connected IP address is correct; port mapping is normal and confirm the Nano SIM card supports directional domain name

6 Appendix References

Table 4: Terms and Abbreviations

Abbreviation	Description
BDS	BeiDou Navigation Satellite System
CORS	Continuously Operating Reference Stations
DHCP	Dynamic Host Configuration Protocol
Galileo	Galileo Satellite Navigation System (EU)
GLONASS	Global Navigation Satellite System (Russia)
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
MEMS	Micro-Electro-Mechanical System
NTRIP	Networked Transport of RTCM via Internet Protocol
QZSS	Quasi-Zenith Satellite System
RTCM	Radio Technical Commission for Maritime Services
TNC	Threaded Neill-Concelman Connector
Web UI	Website User Interface

Compliance Information

European Union (EU)

This product and applicable accessories are CE-certified and strictly comply with the following harmonized European Union (EU) directives:

- Radio Equipment Directive (RED) 2014/53/EU: Compliance for wireless/RF devices (e.g., Wi-Fi, Bluetooth).
- Restriction of Hazardous Substances Directive (RoHS) 2011/65/EU: Restrictions on hazardous substances (e.g., lead, mercury).
- Waste Electrical and Electronic Equipment Directive (WEEE) 2012/19/EU: Obligations for e-waste recycling.
- Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH): Chemical substance regulations.

Declaration of conformity

This product complies with the radio interference requirements of the European community. Hereby, Quectel Wireless Solutions Co., Ltd. declares that the product is in compliance with the essential requirements and other relevant provisions of RE Directive 2014/53/EU. You can find the Declaration of Conformity on www.tarrius.com

North America

United States:

- FCC Part 15 (CFR 47): EMI/EMC compliance for digital/radio frequency devices.

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a class B

digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Canada:

- ISED RSS Standards: RF compliance (e.g., RSS-247 for Wi-Fi devices).

This device contains licence exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence exempt RSS(s). Operation is subject to the following two conditions:

- 1.This device may not cause interference.
- 2.This device must accept any interference, including interference that may cause undesired operation of the device.

The device has been evaluated to meet general RF exposure requirement. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Le dispositif a été évalué pour répondre aux exigences générales d'exposition aux ondes radiofréquences. Cet équipement doit être installé et utilisé avec une distance minimale de 20cm entre le radiateur et votre corps.