



## HiSky QSIG0004 Fixed Terminal Installation Guide

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Fixed Terminal Ku 8X8 V2  
Quick Start Installation Guide



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## QSIG0004 Fixed Terminal

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## Introduction

The Quick Start Guide provides basic information for installation, identification of connectors and visual indicators, as well as regulatory information for the hiSky IoT Fixed Ku V2 Terminal.

## Product Description

hiSky Smartellite™ Fixed Ku V2 terminal is part of a unique line of satellite terminals that features innovative technology, enabling stationary operations for various applications in the IoT field. The Smartellite™ Fixed Ku V2 terminal is a low-cost, compact satellite device based on a state-of-the-art design. The terminal comprises Patch antennas and a built-in modem, providing a mountable all-in-one solution, which independently & seamlessly directs comms through GEO satellites.

This exceptional LDR ground terminal is a part of hiSky's agile IoT network, enabling IoT services according to our customer's applicational needs.

## Related Documents

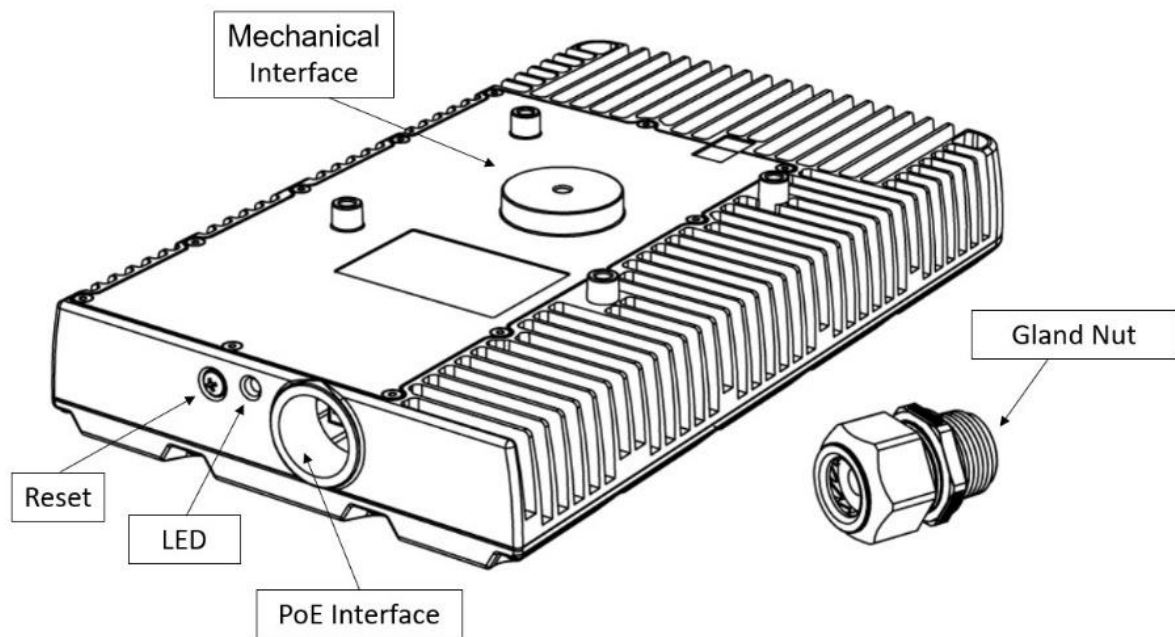
For information about related documents please navigate to <https://www.hiskysat.com>. hiSky strives to produce documentation that is technically accurate and easy to use. hiSky welcomes feedback. Send comments to [support@hiskysat.com](mailto:support@hiskysat.com).

## Getting Help

For answers to questions or for more information, contact hiSky support at [support@hiskysat.com](mailto:support@hiskysat.com).

## Fixed Ku V2 Terminal Overview

**WARNING:** Do not open the terminal or make any changes to the terminal construction. An opening may expose personnel to dangerous voltages or other hazards. There are no user-serviceable parts inside. Avoid placing the Terminal near open flames or any high heat.



Part	Description
Status LED	Off: Powered off
	Slow Flashing green: Searching for satellite (terminal initialization or tracking lost ).
	Fast Flashing green: registration process
	Solid Green: Service available (terminal locked/track and registered).
	Flashing Blue (every burst): Terminal transmits (toggle every half-second for 250 mil).
	Flashing red: No service due to registration problem
	Red: Power up / Failure
	Solid Blue: Recovery Mode
Connector	R.145 / PoE for external Power and Data interfaces
Additional mechanical part for sealing the PoE interface thread	Plastic Gland

The terminal kit contains the following items: IoT Fixed Ku 8X8 V2 Terminal, plastic Gland and this Quick Start Guide.

The kit does not include a power supply, bracket, screws, cables, or any other mechanical parts for the

installation.

### **Power Supply (not supplied with the kit)**

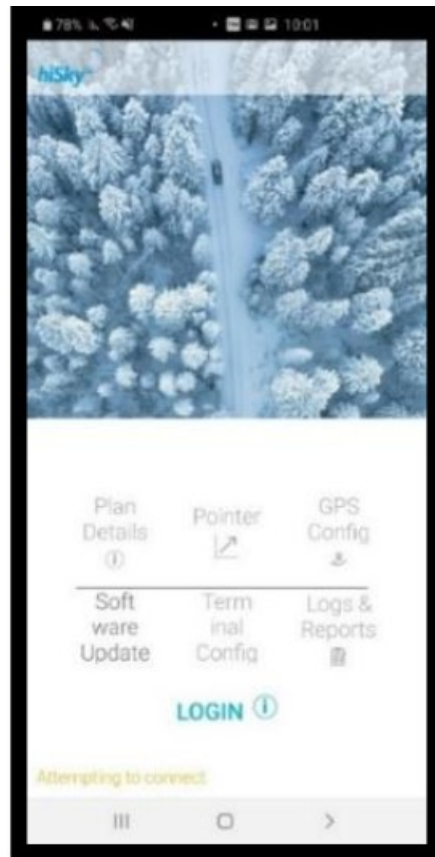
**AC to DC power supply/Connector Type:** POE injector.

**Input:** 100-240VAC 50 -60Hz **Output:** 57VDC – 0.8A

**WARNING:** The power supply must be certified for safety, electromagnetic compatibility, and all the regulations in the region where the terminal will operate. Follow all safety instructions according to the manufacturer of the power supply. A qualified technician should examine the risk of electrical shock and energy hazards of power supply failures according to manufacturer instructions.

## **Overview of First Run Operation with the hiSky 360 App**

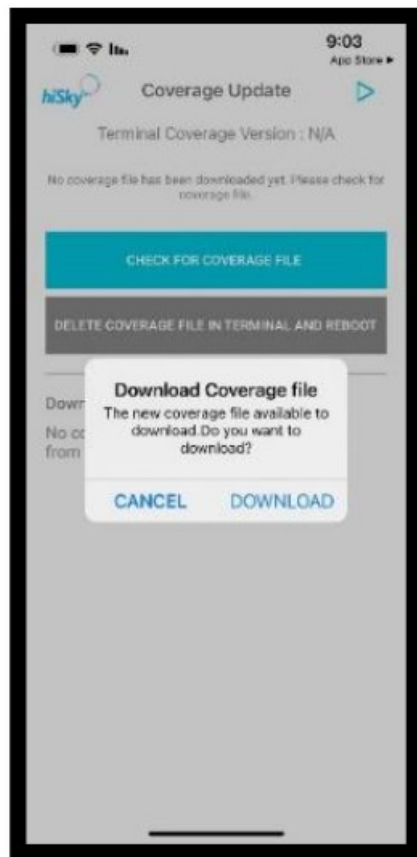
### **1. Initial Login:**



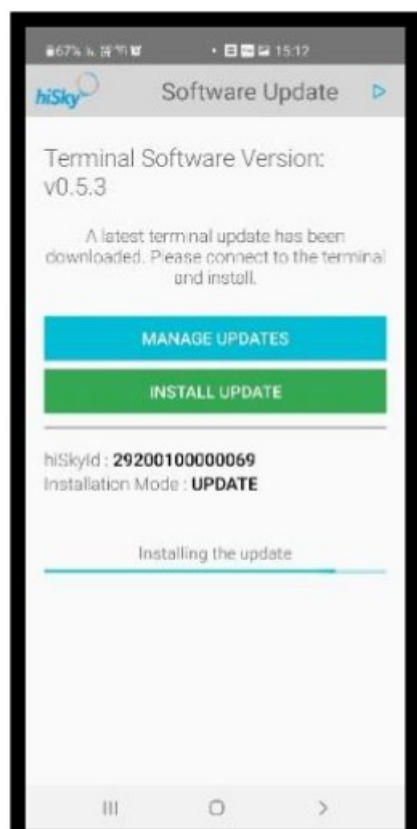
- a) Confirm Internet connectivity to your smartphone for the initial Login and software download steps.
- b) Download the hiSky App from iPhone App Store or Android Google Play Store.
- c) Click on the hiSky360 App icon.
- d) Click LOGIN on the main screen.
- e) Add the account credentials (username and password) related to your hiSky360 account.
- f) Choose the NMS connection and tap LOGIN.

### **2. Software coverage file update:**

- a) On the main hiSky360 App screen, click on Software Update.
- b) Click Ok to continue with the software update process.
- c) Click on MANAGE UPDATES.
- d) Click on CHECK FOR UPDATES FROM NMS.
- e) Select the latest fixed Ku software version for your terminal.
- f) Download the software files to your mobile app.
- g) Download the polygons files to your mobile app (scroll the main page to the left).



- h) Ensure the terminal's mounting side is facing down and connect the terminal to a power source.
- i) Connect your smartphone to the terminal WI-FI access point. The default SSID is the terminal serial number + the characters WF (for example 2970000000001WF). The default password is admin123.
- j) Wait for the application to attach to the terminal software. The status will initially show "Attempting". Wait until it shows "Connected" before proceeding with the upgrade.
- k) On the main hiSky App screen, click on SOFTWARE UPDATE.
- l) Click on INSTALL UPDATE.
- m) At the end of the update, the terminal will reboot.

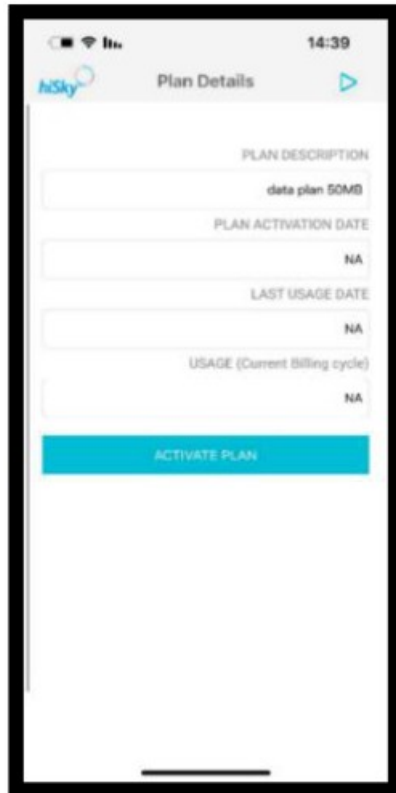


### 3. Choose Satellite Parameters

- a) Connect your smartphone to the terminal WI-FI access point.
- b) Return to the main screen and click on TERMINAL CONFIG.
- c) Use the TERMINAL CONFIG button to integrate between the terminal and the User Device.

### 4. Active the service plan

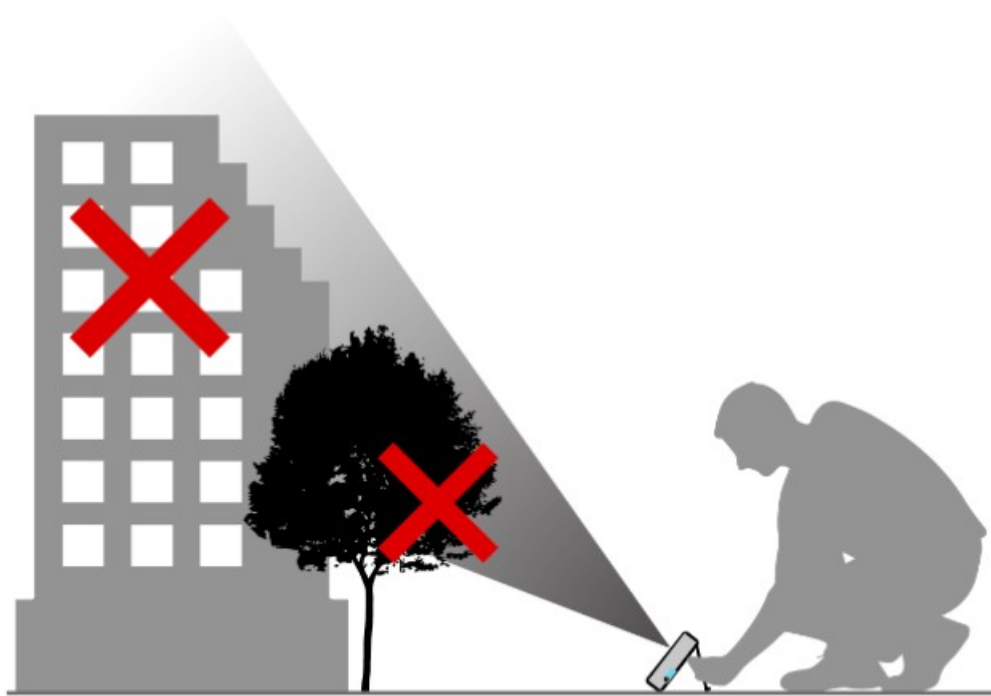
- a) Connect your smartphone to the terminal's WI-FI access point.
- b) Login to the hiSky App via a terminal connection.
- c) On the main hiSky 360 App screen, click on Plan Details.
- d) Click the ACTIVE PLAN button and wait for confirmation.



### 5. Connect the Satellite and the Terminal

To establish connectivity between the satellite and the terminal, do the following:

- a) Place the terminal on level ground or tripod mount.
- b) Place the terminal in a clear line of sight between the terminal and the satellite. Any buildings, trees, people, or other objects in the path may interfere with connectivity.



- c) Use the Pointer on your smartphone to aim the terminal in the best satellite direction. d) Check the Elevation indicator, which provides the position of the relevant satellite on the elevation scale.
- e) Adjust the terminal position in the elevation axis to obtain the maximum signal.
- f) Wait until the status LED shows fast flashing green and then appears solid green.

#### 6. Install the Terminal:

**WARNING:** Improper installation can lead to the device falling causing serious personal injury or damage to equipment. The selected mounting solution must meet the local standard requirements. The installer is responsible to make sure the installation will meet usage guidelines.

**WARNING:** Radio frequency hazard keep a distance of at least 20cm during terminal operation.

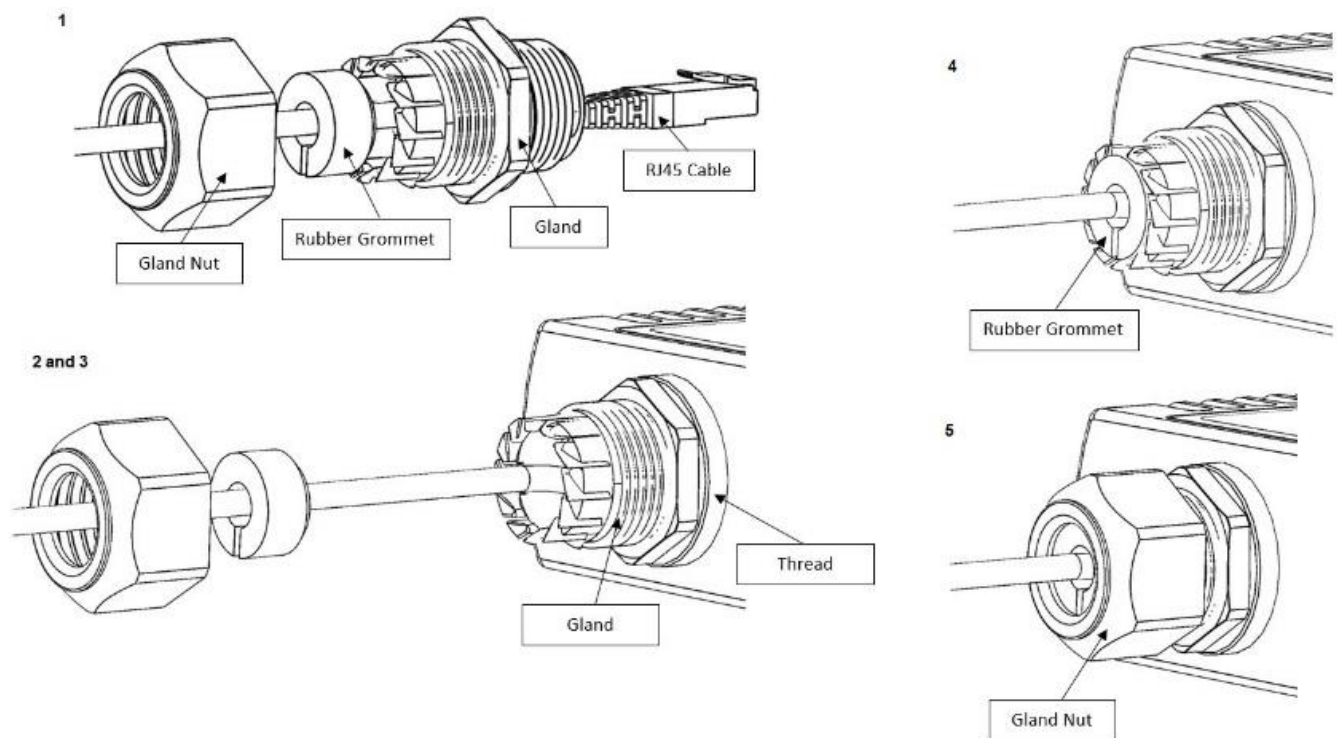
**WARNING:** Do not open the terminal or make any changes to the terminal construction. An opening may expose personnel to dangerous voltages or other hazards. There are no user-serviceable parts inside. Do not submerge the unit in water, avoid exposure to severe rain or extreme temperatures.

Avoid placing the Terminal near open flames or any high heat.

#### **RJ-45 Cable Setup:**

- a) Insert the RJ-45 cable through the gland nut, rubber grommet, and gland.
- b) Connect the RJ-45 cable into the cable port.
- c) Attach the gland into the threaded opening.
- d) Fit the rubber grommet into the gland.
- e) Fit the gland nut into the gland thread.





**WARNING:** Do not reopen the Gland after attaching the Gland Nut to the terminal.

### Mounting Methods:

- Pole – The Fixed Ku V2 terminal can be mounted on a fixed pole using: an installation bracket, pole bracket, adjustable azimuth bracket, and installation screws.
- Wall- The Fixed Ku V2 terminal can be mounted on a wall mount bracket attached by installation screws to the wall.

### Fixed Ku V2 terminal Installation

Use the mounting interfaces described below, using:

- 1/4 Thread Standard Tripod Mount.
- M6 75mm VESA and 1/4 Thread interface.

### 7. Re-pointing and Gland Sealing

- a) Fit the gland nut into the gland thread to seal the gland.
- b) After installing the terminal, use the Pointer on your smartphone to aim the terminal in the best satellite direction, if needed.

### 8. Troubleshooting

Issue	Workaround
WI-FI connection cannot be established between the smartphone and the terminal.	Make sure a WI-FI connection is available on the smartphone.
The terminal cannot establish satellite connectivity (Slow Flashing Green).	The terminal initialization or tracking is lost. Place the terminal in a clear line of sight between the terminal and the satellite. Any buildings, trees, people, or other objects in the path may interfere with connectivity.
The terminal can't register to hiSky Network (LED status is fast flashing green).	Ensure the terminal is registered under your hiSky360 account and with an active service plan
GPS problem	Connect your smartphone to the terminal. On hiSky app main screen click on GPS Config > Refresh > save.

#### 9. IoT Fixed Ku 8X8 V2 Terminal Specifications

Parameter	Value	Notes
Transmit Frequency	13.75-14.5GHz	
Receive Frequency	10.7-12.75GHz	
Communication Interfaces	Ethernet, WI-FI, BLE	
Idle power consumption	9W	Digital only
Rx only power consumption	16.5W	RX on, TX save mode
Tx & Rx power consumption	38W	
Operational Temperature	-20°C to +60°C / -4°F to +140°F	
Dust and water ingress	IP67	
Certifications	CE, FCC	
Accessories	Plastic Gland	
Mechanical dimensions H / W / D:	45 / 180 / 300 mm	
Weight	2.3 Kg	

#### Danger/Warning Symbol

**WARNING:** This symbol means danger! You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents

#### Lightning Activity Warning

**WARNING:** Do not work on the system or connect or disconnect cables during periods of lightning activity.

## **Operating Temperature and Airflow Warning**

**WARNING:** To prevent the unit from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature as defined in the Mechanical and Environmental Specifications table. To prevent airflow restrictions, allow approximately 6 inches (15.2 cm), or adequate space, for clearance around the external heat sink fins.

## **Installation Warning**

**WARNING:** Read the installation instructions before connecting the system to the power source.

## **Power Supply Circuit Warning**

**WARNING:** Care must be given to connecting units to the supply circuit so that wiring is not overloaded.

## **Agency Compliance**

For detailed information on standards, see <https://www.hiskysat.com/ProductDocumentation>.

## **FCC Compliance**

### **Part 15 Compliance**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to 47CFR Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The equipment uses, generates, and radiates radiofrequency energy. If the equipment is not installed and used by the instructions, it may cause harmful interference to radio communications. There is also no guarantee that interference will not occur in a particular installation. To determine if the equipment is interfering with radio or television reception, remove or apply power to the equipment and see if the interference goes away, or returns, when the unit is off or on.

To meet FCC requirements, only peripherals, such as computer input/output devices, terminals, and printers certified to comply with the Class B limits, may be attached to this device. Operation with noncertified peripherals is likely to result in interference to radio and TV reception. To meet FCC requirements, shielded cables are required to connect the device to a personal computer, peripheral, or other Class B certified device.

**WARNING:** Modification of this equipment without written authorization from hiSky may result in this equipment no longer complying with FCC requirements for Class B digital devices. In that event, the rights to use the equipment may be limited by FCC regulations, and the user may be required to correct any interference to radio or television communications at their own expense.

## **Safety**

TUV Rheinland of North America is a Nationally Recognized Testing Laboratory (NRTL) in the United States and is accredited by the Standards Council of Canada to test and certify products to Canadian National Standards. The Fixed Terminal Ku 8X8 V2 complies with both U.S. and Canadian National Standards on Safety.

In addition, the Fixed Terminal Ku 8X8 V2 complies with EU National Standards on Safety.

## **Compliance with RoHS Directive**

Details can be found on the hiSky Web site located at <https://www.hiskysat.com/ProductDocumentation>.

## Compliance with WEEE Directive

When hiSky products have reached the end of their useful life, hiSky distributors will be responsible for making provisions for the treatment of such WEEE using authorized approved treatment facilities. Please contact the distributor directly.

## Canadian Labeling Requirements

The Fixed Terminal Ku 8X8 V2 complies with Class B of Canadian ICES-003 regulations. CAN ICES-3 B/NMB-3B.

## CE Compliance (European Union)

hiSky declares that the radio equipment type Fixed Terminal Kau 8X8 V2 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at <https://www.hiskysat.com/ProductDocumentation>.

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## Documents / Resources

	<p><a href="#">HiSky QSIG0004 Fixed Terminal</a> [pdf] Installation Guide FKU8X8V2, 2A4L8-FKU8X8V2, 2A4L8FKU8X8V2, QSIG0004 Fixed Terminal, QSIG0004, Fixed Terminal, Terminal</p>
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## References

- [Homepage | Hisky satellite | low cost voice, data and IoT | Satellite](#)
- [Homepage | Hisky satellite | low cost voice, data and IoT | Satellite](#)
- [Policies | hiSky](#)
- [Smartellite Family | hiSky | Wi Fi Satellite | Engine Telemetry](#)