



# HiSky Ka 8X8 V2 IoT Dynamic Terminal Installation Guide

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**HiSky Ka 8X8 V2 IoT Dynamic Terminal**



### Related Documents

For information about related documents please navigate to <https://hiskysupport.freshdesk.com/support/home>. 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).

### 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 Dynamic Terminal Ka 8X8 V2.

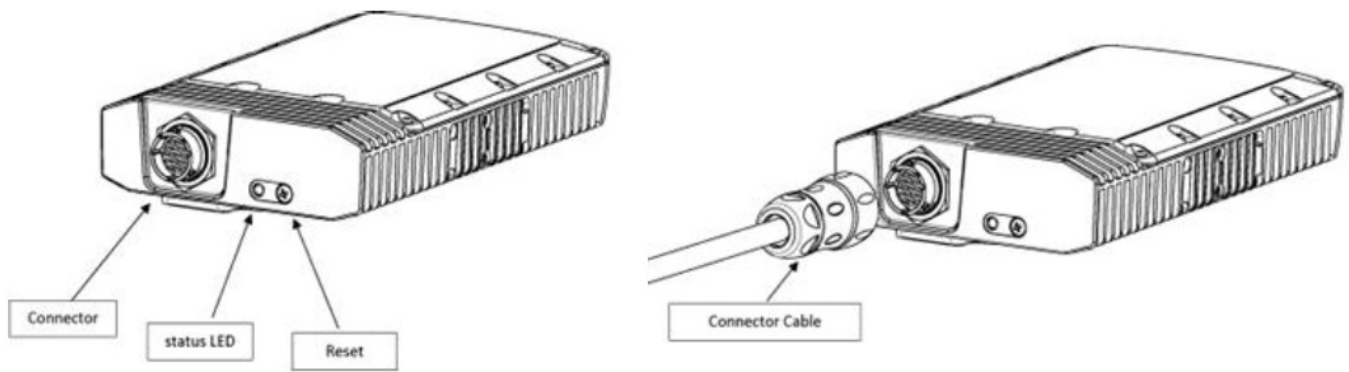
### Product Description

The IoT Dynamic Terminal Ka 8X8 V2 is a compact form-factor device that enables on-the-move satellite connectivity to sensors/smartphones / IoT gateways. The terminal includes an innovative modem and phased array antennas with WI-FI / Bluetooth and Ethernet for user device interfaces. The terminal supports IoT data transmission such as fleet management data, environment conditions, alarm events, sensors loggers, operations, and much more, as well as command and control of sensors and remote systems.

### 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 transmit (toggle every half- second for 250 mil).
	Flashing red: No service due to registration problem
	Red: Power up / Failure
	Solid Blue: Recovery Mode
Connector	Circular connector 19 pin: DC, Ethernet, Serial – 232/485, Wake up I/O

The terminal kit contains the following items: IoT Dynamic Ka 8X8 V2 Terminal, and this Quick Start Guide. The kit does not include a bracket, screws, cables, or any other mechanical parts for the installation.

## Power Supply

Obtain the power cable from your supplier. Only power up the system with one of the following options:

- AC to DC power supply – 12-24V, 48W DC jack 2.5X5.5MM.
- DC to AC inverter connected from the vehicle to AC to DC power supply.
- DC cable connected from a vehicle directly to the system 12V DC jack 2.5X5.5MM

### **WARNING:**

Both the power supply and the inverter 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 and inverter.

A qualified technician should examine the risk of electrical shock and energy hazard of power supply and inverter failures according to manufacturer instructions.

## Operation the hiSky 360 App

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

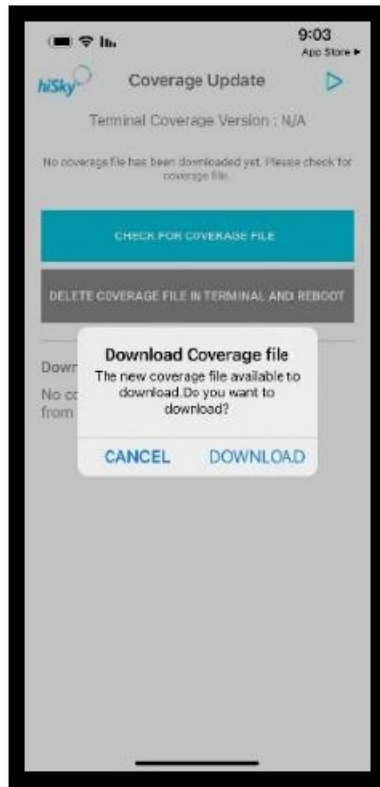
### Initial Login:



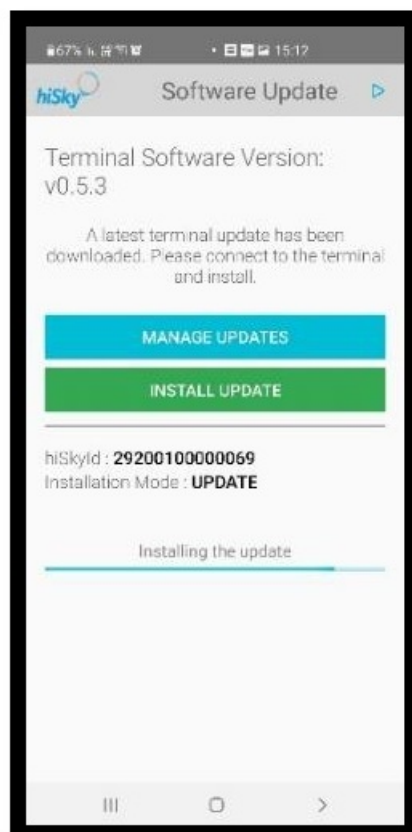
- Confirm Internet connectivity to your smartphone for the initial Login and software download steps.
- Download the hiSky App from iPhone App Store or Android Google Play Store.
- Click on the hiSky360 App icon.
- Click LOGIN on the main screen.
- Add the account credentials (username and password)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

### Software and coverage file update:

- On the main hiSky360 App screen, click on Software Update.
- Click Ok to continue with the software update process.
- Click on MANAGE UPDATES.
- Click on CHECK FOR UPDATES FROM NMS.
- Select the latest Dynamic Ka software version for your terminal.
- Download the software files to your mobile app.
- Download the polygons files to your mobile app (scroll the main page to the left).



- Ensure the terminal's mounting side is facing down and connect the terminal to a power source.
- 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.
- 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.
- On the main hiSky App screen, click on SOFTWARE UPDATE.
- Click on INSTALL UPDATE.
- At the end of the update, the terminal will reboot.

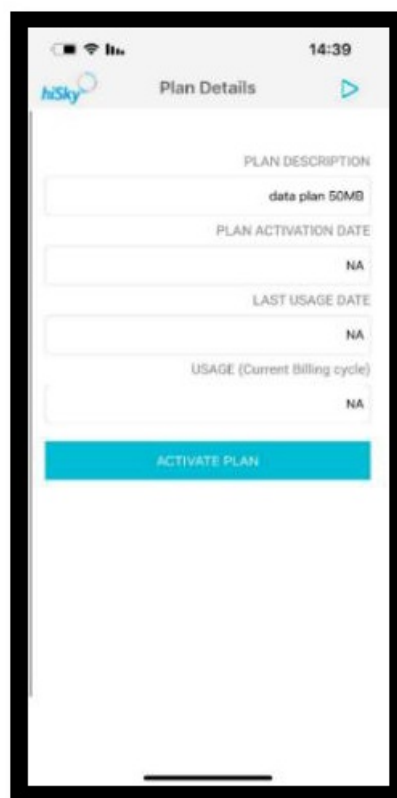


## Choose Satellite Parameters

- Connect your smartphone to the terminal WI-FI access point.
- Click on the GPS CONFIG on the hiSky main screen.
- Click on REFRESH and SAVE the location parameters.
- Return to the main screen and click on TERMINAL CONFIG.
- In the Satellite Parameters section, ensure that the correct beam number is being used. If not, select the relevant beam number.
- Click SAVE.
- Restart the terminal by pushing the power button. Ensure that the terminal's mounting side is up before restarting the terminal.
- Use the TERMINAL CONFIG button to integrate between the terminal and the User Device.

## Active the service plan

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



## Connect the Satellite and the Terminal

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

- Place the terminal on level ground or tripod mount.
- 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.

- Wait for the status LED to turn solid green.

## Installation

### Install the Terminal

#### Mobile/On the move Installation

Terminal installation on a vehicle uses custom-made magnets or other mounting solutions, depending on the vehicle. For the most suitable solution, please contact your provider.

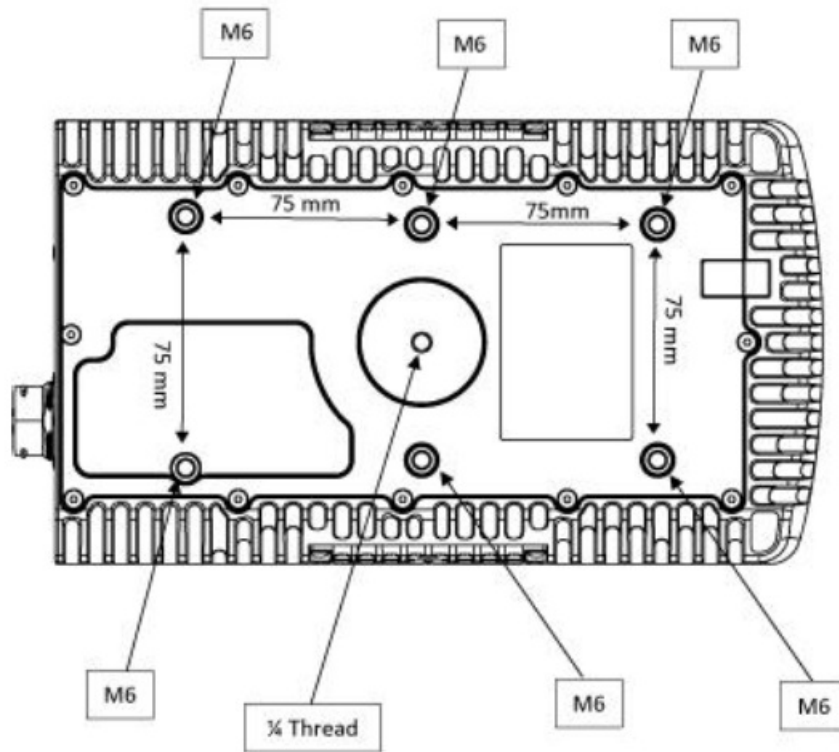


- **WARNING:** The metal surface must be clean and straight, and all magnets should be firmly attached to the metal before driving. Before a drive, secure the power cable. Avoid driving fast on bumpy roads and in dangerous curves.
- **WARNING:** Improper installation can lead to the device falling causing 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.

#### Fixed or Tripod Installation

Use the mounting interfaces described below, using at least the six M6 VESA 75X75 screws.

- 1/4 Thread – Standard Tripod Mount.
- 75x75 VESA mount M4 Threads Extra Two M4 Threads.



## 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. Check for relevant integration instructions
Terminal cannot establish satellite connectivity (Slow Flashing Green).	Check the service plan status in the hiSky mobile app.
Unsuccessful registration to hiSky mobile app.	Internet connection is required for the initial Login.
LED is Flashing red	No service due to registration problem- Ensure initial registration to hiSky network and plan activation.

## Specifications

### IoT Dynamic Terminal Ka 8X8 V2 Specifications



Parameter	Value	Notes
Transmit Frequency	27.5GHz – 30GHz	
Receive Frequency	17.7GHz – 20.2GHz	
Communication Interfaces	Ethernet, WI-FI, BLE	
Idle power consumption	8W	Digital only
Rx only power consumption	18W	RX on, TX save mode
Tx & Rx power consumption	30W	
Input Voltage Range	12 – 24VDC	Dropout on the supply wires should be taken into consideration.
Operational Temperature	-20°C to +55°C / -4°F to +131°F	
Dust and water ingress	IP67	
Vibration	SAE J1455	
Salt spray:	SAE J1455	
Certifications	CE, FCC	
Mechanical Dimensions H / W / D:	42/141 / 244mm	
Weight	1.4 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 in accordance with 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 non-certified 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. 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 IoT Dynamic Terminal Ka 8X8 V2 is in compliance with both U.S. and Canadian National Standards on Safety. In addition, the IoT Dynamic Terminal Ka 8X8 V2 is in compliance 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 IoT Dynamic Terminal Ka 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 IoT Dynamic Terminal Ka 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>.

## Documents / Resources

	<p><a href="#">HiSky Ka 8X8 V2 IoT Dynamic Terminal</a> [pdf] Installation Guide DKA8X8V2, 2A4L8-DKA8X8V2, 2A4L8DKA8X8V2, Ka 8X8 V2, Ka 8X8 V2 IoT Dynamic Terminal, IoT Dynamic Terminal, Dynamic 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](#)

[Manuals+](#).