



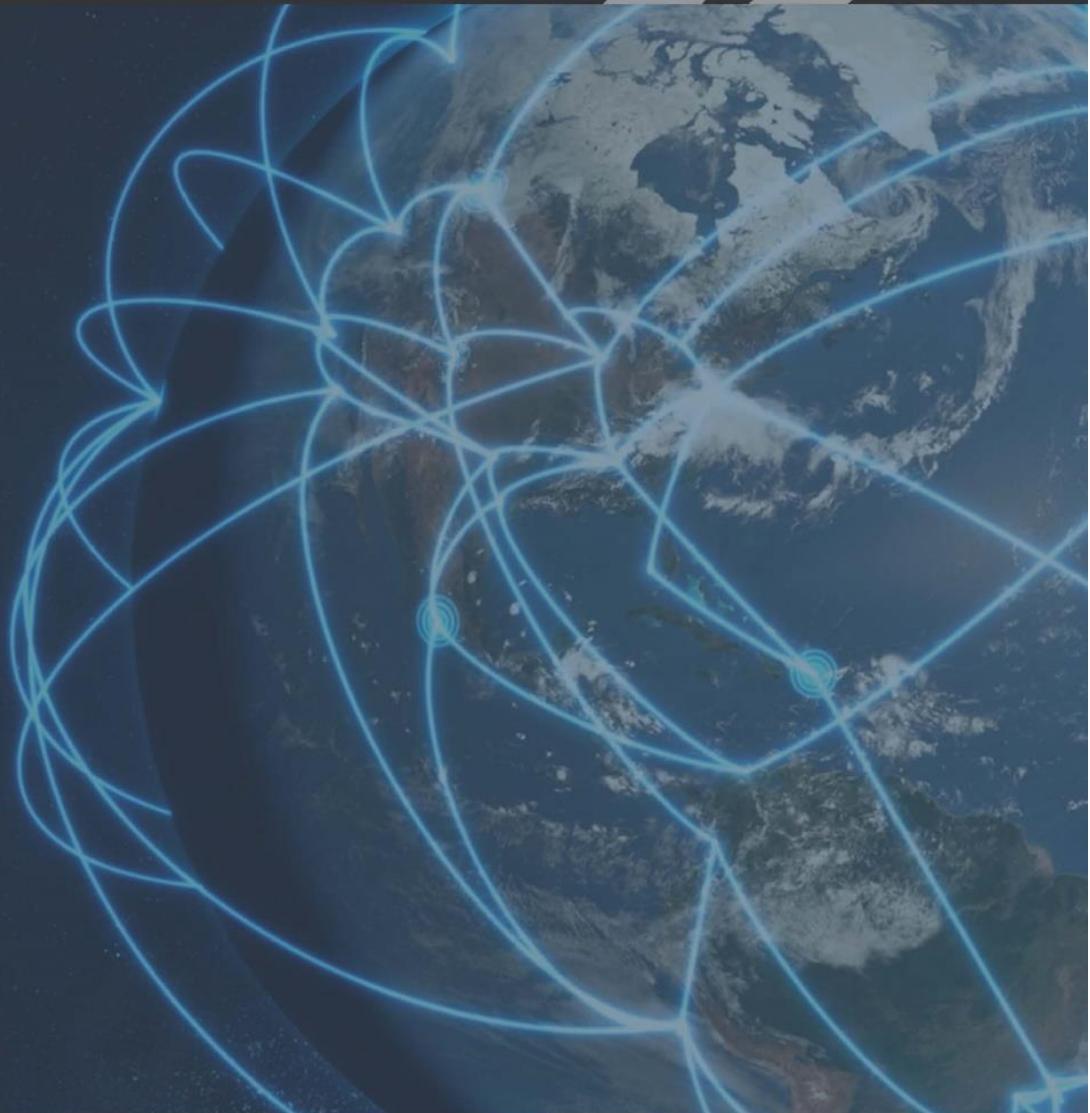
# Blue Sky Network

**Global Internet**



**Global Voice**

**Data & Media Sharing**



# SkyLink Cloud Services Customer User Guide

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# **SkyLink Cloud Services**

Customer User Guide

Version 2.0

Part Number: SL10001

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## ABOUT THIS USER GUIDE

Thank you for purchasing SkyLink by Blue Sky Network! This easy-to-read user guide is organized based on the steps needed to log in to and utilize SkyLink Cloud Services portal as a customer.

SkyLink Cloud Services allows you to remotely manage, monitor, and configure a fleet of devices as well as view aggregated device data in a secure online portal. For singular device management, please use the SkyLink Device Interface (see the SkyLink User Guide for detailed information).

We sincerely hope that SkyLink enhances your ability to monitor and configure your assets anywhere in the world. Please continue to read on or choose a starting point from the list below:

- [Edit your contact information](#)
- [Edit your organization's information](#)
- [View or create device & voice profiles](#)
- [Assign a device or voice profile](#)
- [Frequently asked questions](#)

## ABOUT SKYLINK

### Introduction to SkyLink

Designed for you as Infrastructure as a Service, SkyLink Cloud Services is a comprehensive analytics solution engineered to capture and disseminate mission-critical information and display it in a secure online portal. Customizable reports, activity alerts, and dashboards work around the clock, ensuring data is recorded in real-time for complete visibility anytime and anywhere in the world.

The SkyLink Data Gateway works seamlessly with SkyLink Cloud Services to create a powerful, dual-mode managed solution unlike any other. Small-form, multi-stack hardware unites with a performance-driven, cloud-based platform to offer reliable connectivity for end-to-end sensor reporting, asset utilization, IoT/M2M monitoring, and two-way messaging.

Key features include:

- Remote device management
- Sensor/engine diagnostics
- Network services (VPN, IP, MQTT)
- IP65 Certified
- Health monitoring
- Data analytics/edge computing
- SkyRouter integration
- FCC Part 15 & 25 Certified

## GETTING STARTED

### Compatibility and System Requirements

To access the SkyLink Cloud Services portal, you will need 1) an internet connection and 2) a recent version of a web browser that supports HTML5.

SkyLink Cloud Services has been tested with the following recommended browsers:

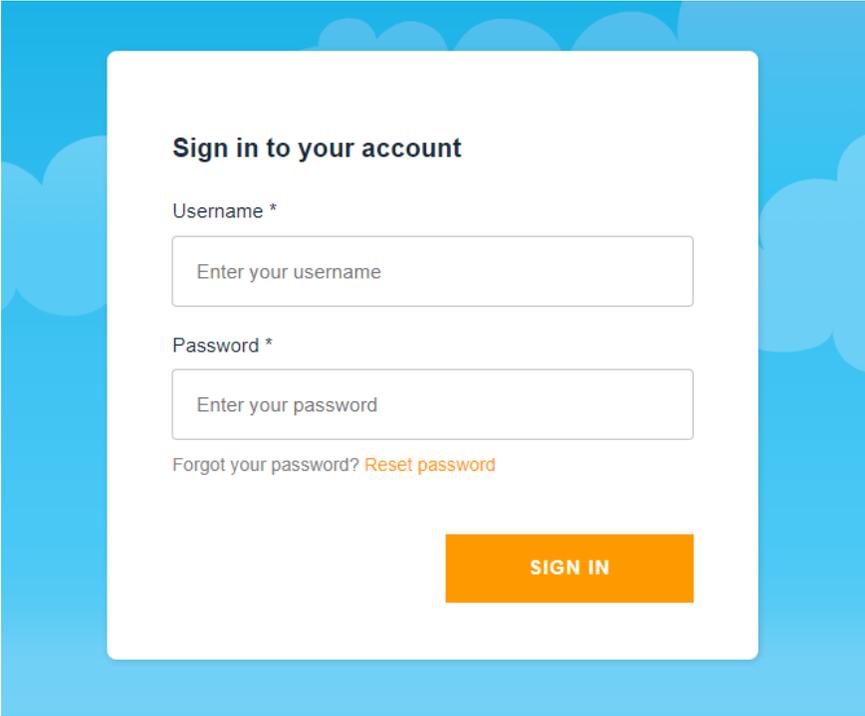
- Google Chrome (Mac/Windows)
- Mozilla Firefox (Mac/Windows)
- Safari (Mac)
- Microsoft Edge (Windows)

### Connecting to Cloud Services

Open a web browser, type the below URL into the address bar, then press 'enter' on your keyboard.

SkyLink Cloud Services URL: **https://portal.skylink.net/login**

Fill in the Username and Password fields, then press 'SIGN IN.'



**Sign in to your account**

Username \*

Password \*

Forgot your password? [Reset password](#)

**SIGN IN**

**NOTE:** Only accounts with valid permissions can create users in their organization. For help setting up a user, please contact the Blue Sky Network support team.

## SKYLINK CLOUD SERVICES

### Overview

The tabs at the top of each screen allow you to easily find important device information and make configurations. In order, they are:

- [Dashboard](#)
- [My Org](#)
- [Devices](#)
- [Users](#)
- [Profiles](#)
- [Firmware](#)
- [Help](#)

**NOTE:** Not all users can modify data on each screen (see the User Permissions section below).

---

### ACCOUNT SETTINGS



The wheel icon located in the upper right-hand corner of each screen allows you to edit your name, email, phone number, and physical address. Complete the mandatory fields, indicated by an asterisk (\*), then press 'Save'.

## User Permissions

A user can be assigned as one of three types: 1) Admin, 2) Account Manager, or 3) Reviewer. See the chart below to learn about each role’s capabilities and restrictions. Please contact your Blue Sky Network account manager with any questions or for more information.

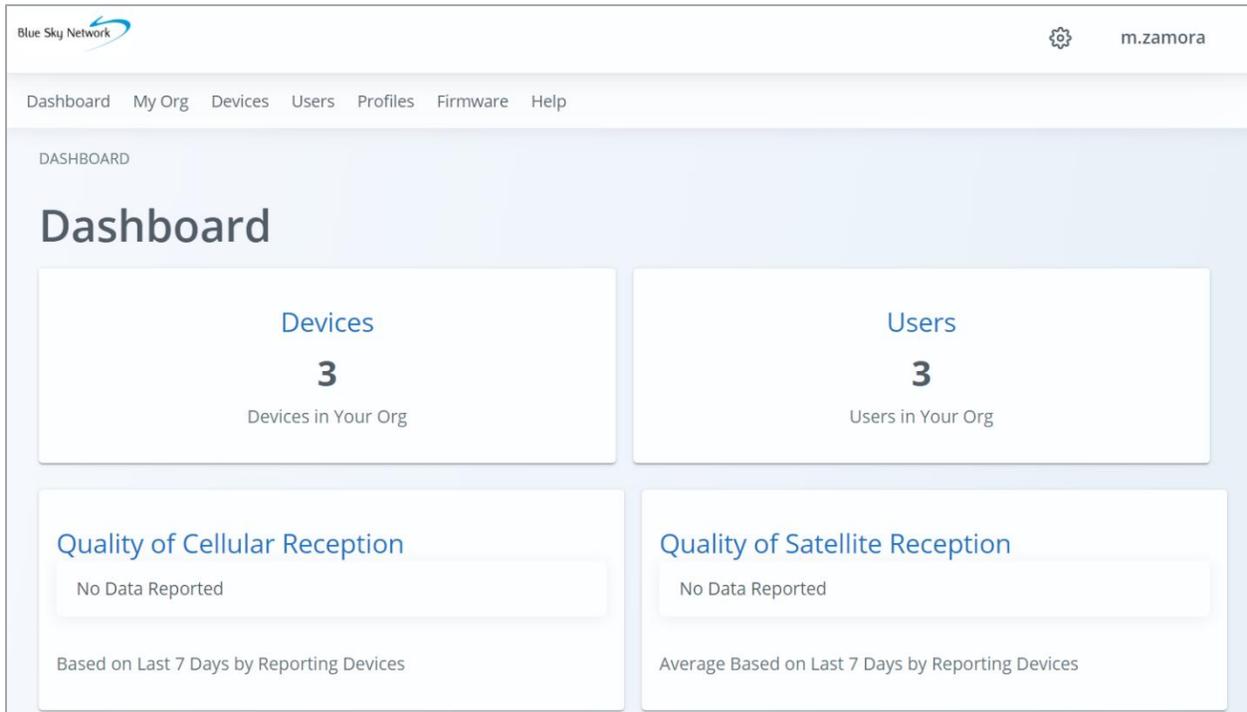
Screen	Action	Sub-Action	Account Type			
			Admin	Account Manager	Reviewer	
My Org	View		Yes	Yes	Yes	
	Update		Yes	No	No	
Devices	View		Yes	Yes	Yes	
	Create		No	No	No	
	Delete		No	No	No	
	Update					
		Name		Yes	Yes	No
		Asset Tag		Yes	Yes	No
		Serial Number		No	No	No
		Device Type		No	No	No
		Attributes		No	No	No
		Tags		Yes	Yes	No
		Device Profile		Yes	Yes	No
		Voice Profile		Yes	Yes	No
		Actions				
	Lock			No	No	No
	Unlock			No	No	No
	Hard Factory Reset			Yes	Yes	No
	Factory Reset			Yes	Yes	No
	Reboot			Yes	Yes	No
	Firmware Update			Yes	Yes	No
View Device Profile			Yes	Yes	Yes	
View Voice Profile		Yes	Yes	Yes		
Users	View		Yes	Yes	Yes	
	Create		Yes	Yes	No	
	Delete		Yes	Yes	No	
	Update					
		Role		Yes	Yes	No
		Organization		No	No	No
		Is Enabled		Yes	Yes	No
		Name		Yes	Yes	No
Username		No	No	No		

		Email	No	No	No	
		Phone	Yes	Yes	No	
		Address	Yes	Yes	No	
	Actions					
		Reset Password	Yes	Yes	No	
Profiles	View		Yes	Yes	Yes	
	Create		Yes	Yes	No	
	Delete		Yes	Yes	No	
	Update		Yes	Yes	No	
	General Settings					
		Name		Yes	Yes	No
		Version		Yes	Yes	No
		Max Daily Usage		Yes	Yes	No
		Serial Port		Yes	Yes	No
		Data Routing		Yes	Yes	No
		Device Password		Yes	Yes	No
		Satellite		Yes	Yes	No
		Data Enabled		Yes	Yes	No
		Wi-Fi		Yes	Yes	No
		SSID		Yes	Yes	No
		Mode		Yes	Yes	No
		Channel		Yes	Yes	No
		Security		Yes	Yes	No
		Password		Yes	Yes	No
		Cellular		Yes	Yes	No
		APN		Yes	Yes	No
	Username		Yes	Yes	No	
	Password		Yes	Yes	No	
Network						
	IP Address		Yes	Yes	No	
	Primary DNS		Yes	Yes	No	
	Network Mask		Yes	Yes	No	
	Secondary DNS		Yes	Yes	No	
	DHCP Start Range		Yes	Yes	No	
	Lease Validity		Yes	Yes	No	
DHCP End Range		Yes	Yes	No		
Firewall Profile		Yes	Yes	No		
Firmware	View		Yes	Yes	Yes	
	Actions					
		Download Firmware		Yes	Yes	Yes

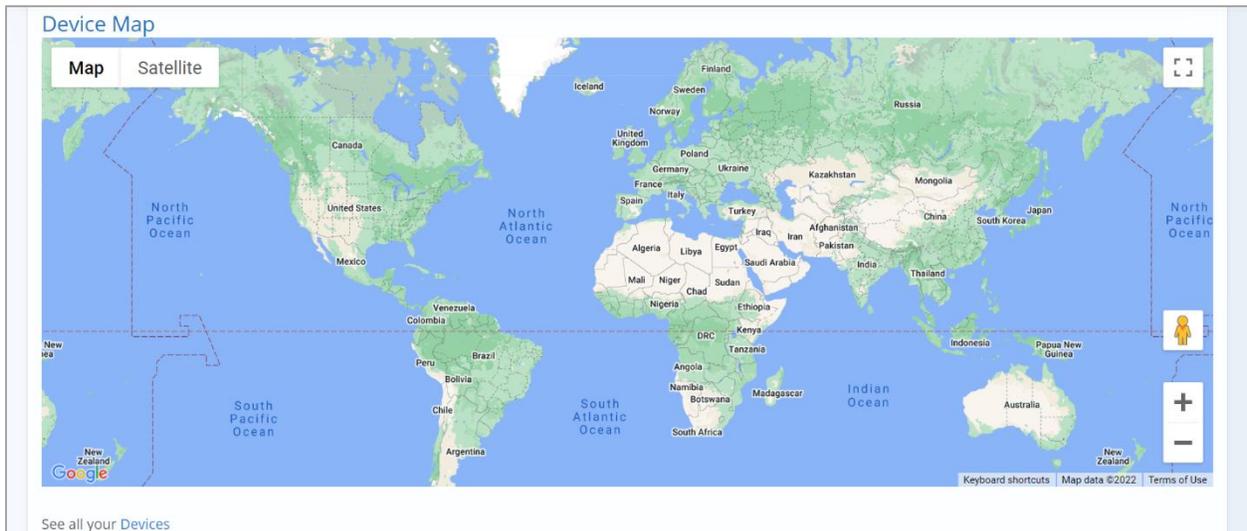
The following sections describe each screen's information and configuration options.

## Dashboard

When you log in to your SkyLink Cloud Services account, you will automatically be directed to the Dashboard screen, where you can see the total number of devices and users present in the system and the reporting devices' average reception quality based on the last 7 days.



The bottom of the screen contains an interactive map for easy asset tracking. Clicking "See all your Devices" below the map will take you to the Devices screen.

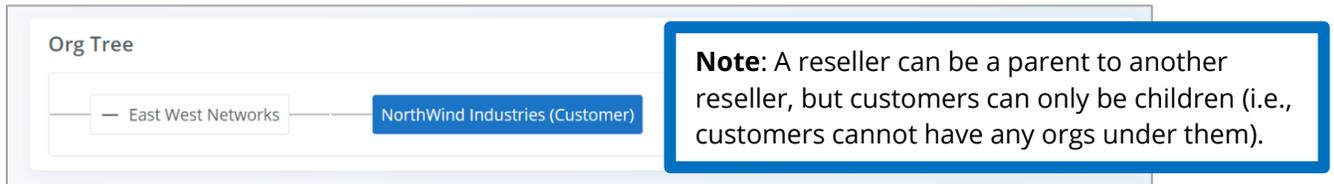


## My Org

View and update your admin and support personnel's contact information here.

The screenshot shows the 'My Organization' page in the Blue Sky Network dashboard. The user is logged in as m.zamora. The navigation menu includes Dashboard, My Org, Devices, Users, Profiles, Firmware, and Help. The main heading is 'My Organization' with a sub-heading 'Contact'. There are three input fields: 'Name' (NorthWind Industries), 'Administrative Contact' (Tim Felder, t.felder@northwind.com), and 'Support Contact' (Kerrie Olsen, k.olsen@northwind.com). A note at the bottom states: 'Support contact information will be displayed to the organizations they manage.'

The Org Tree provides a visual of the parent and child orgs in the system relative to yours. This user's org is NorthWind Industries, a customer whose parent org is East West Networks, a reseller.



The bottom of the screen shows your reseller org's contact information.

The screenshot shows the 'Reseller Org' contact information form. The name is 'East West Networks'. The Admin Contact is Matt Booker, located at 96 Domino Street, Washington, DC 7896, with phone number +1 (458) 6711 9050 and email admin@eastwest.com. The Support Contact is Dave Helper, located at 96 Domino Street, Washington, DC 7896, with phone number +1 (458) 6711 9050 and email support@eastwest.com. A 'Save' button is visible at the bottom left. A blue box highlights the 'Save' button with the text: 'Press 'Save' to apply changes.'

## Devices

This screen allows you to view all devices currently in the system, including their identifying information such as Iridium and cellular IMEI numbers. To assign device or voice profiles, tick the box next to the desired unit(s) under the Name column and press the 'Assign Profiles' button.

Select a unit under the Name column to edit that device's identifying details, make configurations (such as a reboot), and view the call log. See the 'Editing a Device' section below for more info.

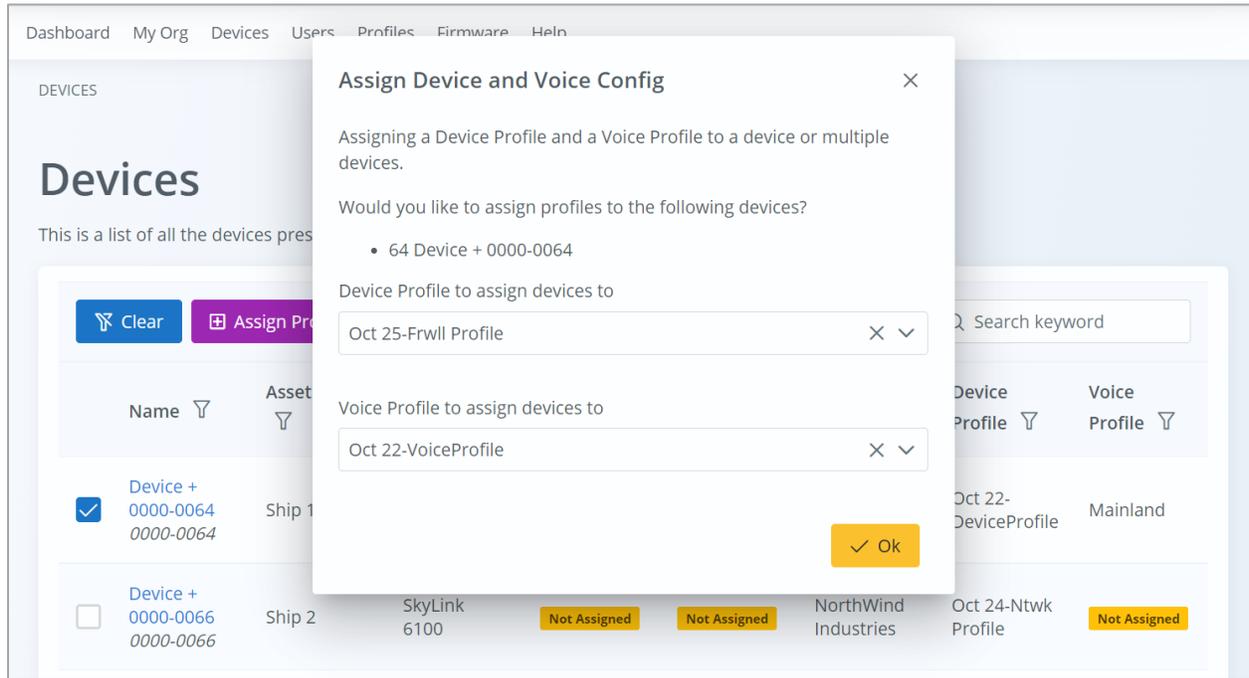
The screenshot shows the 'Devices' management interface. At the top, there is a navigation bar with 'Dashboard', 'My Org', 'Devices', 'Users', 'Profiles', 'Firmware', and 'Help'. The user 'm.zamora' is logged in. Below the navigation is a search bar with the placeholder text 'Type in a partial or entire keyword to find a device.' and a search icon. The main content area is titled 'Devices' and contains a list of devices. Above the list are two buttons: 'Clear' and 'Assign Profiles'. A callout box points to the 'Clear' button with the text 'Click to create filter rules. Press 'Clear' to remove filters.' Another callout box points to the search bar with the text 'Type in a partial or entire keyword to find a device.' The table below lists three devices with columns for Name, Asset Tag, Hardware, Iridium IMEI, Cellular IMEI, Org, Device Profile, and Voice Profile. Each device has a checkbox in the Name column and a 'Not Assigned' status in the Iridium and Cellular IMEI columns.

<input type="checkbox"/>	Name	Asset Tag	Hardware	Iridium IMEI	Cellular IMEI	Org	Device Profile	Voice Profile
<input type="checkbox"/>	Device + 0000-0064 0000-0064	Ship 1	SkyLink 6100	Not Assigned	Not Assigned	NorthWind Industries	Oct 22-DeviceProfile	Mainland
<input type="checkbox"/>	Device + 0000-0066 0000-0066	Ship 2	SkyLink 6100	Not Assigned	Not Assigned	NorthWind Industries	Oct 24-Ntwk Profile	Not Assigned
<input type="checkbox"/>	Device + 0000-0067 0000-0067	Ship 1	SkyLink 6100	Not Assigned	Not Assigned	NorthWind Industries	Oct 25-Frwll Profile	Not Assigned

## ASSIGNING DEVICE & VOICE PROFILES TO A UNIT

Here you can remotely apply standard profiles to a specific device type (e.g., you can assign certain profiles to your IoT devices and a different set to your vehicle devices).

Choose the desired device(s), then use the drop-down menu from the pop-up window to make your profile selections. Press 'Ok.'



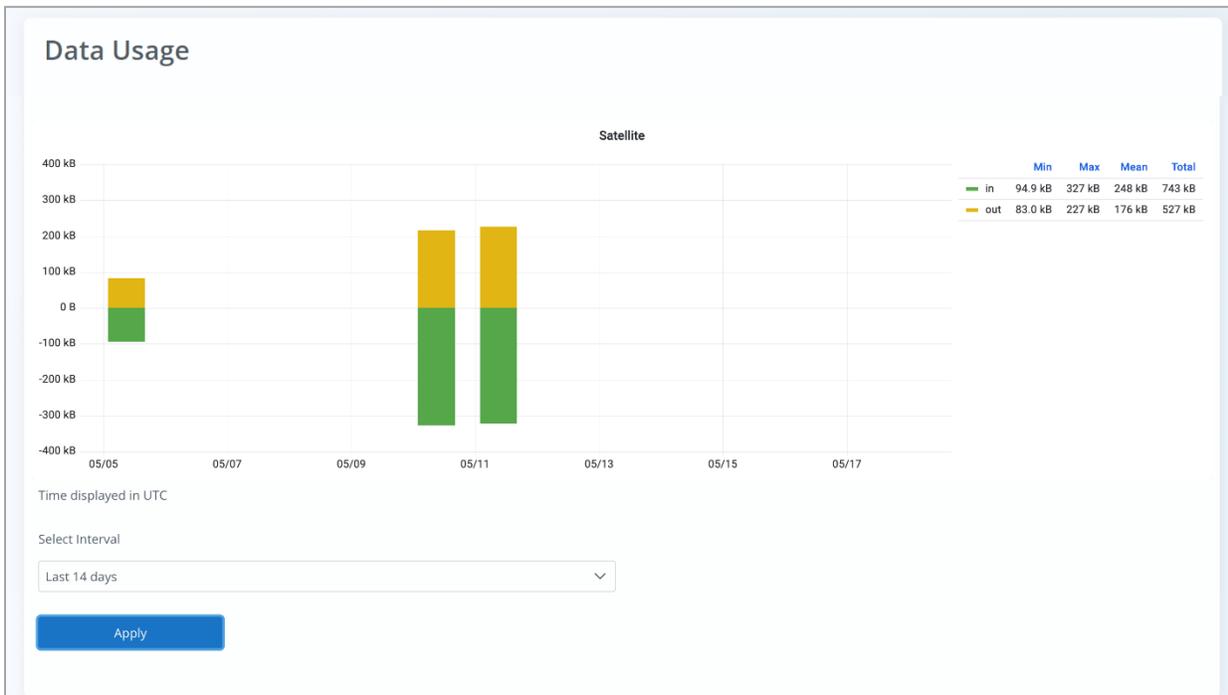
## EDITING A DEVICE

Select a device from the Devices screen, then fill in the desired fields and press 'Save.' Several fields such as Serial Number and Device Type are view only.

### Edit Device

Name*	Asset Tag
Device + 0000-0064	Ship 1
Reported Value:	Reported Value:
Serial Number	Device Type
0000-0064	SkyLink 6100

Use the drop-down menu to view device data usage according to a set time interval.



In the Device Control section, you can update unit firmware, reset it to factory settings, make a config change, or reboot it. These commands may change the device’s current configurations.

### Device Control

! These commands will have an impact on your device and may change its configuration.

Update Firmware
Reset to Defaults
Force Config Push
Reboot

A numbered list of actions performed on a device by a user can be found here. It also includes the day and time it occurred, the action status, number of retries, and a job-specific message, if any. Each job is assigned a unique ID number.

### Jobs History

✕ Cancel Job

<input type="checkbox"/>	Date	Job Number	Job Id	Job Name	Status	Retries	Job Message Id
<input type="checkbox"/>	Mar 14, 2023, 12:52:59 PM	8	b9e7b43f-2c63-43b5-bea9-9091e939a6ff	FACTORY_RESET	User Cancelled	0	
<input type="checkbox"/>	Mar 10, 2023, 11:44:56 AM	7	c0e86624-059a-4641-ae80-1d3639640a4f	FIRMWARE_UPDATE	User Cancelled	0	
<input type="checkbox"/>	Oct 25, 2022, 1:27:38 PM	6	8ec17f1a-b1b0-4eba-8f19-1b616660d088	HARD_FACTORY_RESET	OK	0	

The view-only Attributes section allows you to see the device’s system-defined properties set by super admins. The Tags section lists the unit’s user-defined properties and can be modified by admins and account managers.

### Attributes

Attributes are system defined properties particular to the device. They cannot be changed by users other than super admins.

! These keys need to be unique and may be used by different systems looking for particular keys. For example the billing system would lookup the iridiumlmei key.

---

### Tags

Tags are user defined properties associated with the device. They can be changed by anyone who has access to the device.

Tag Name Tag Value

✕

+ Add Tag

The Reporting section displays the device’s most recent contact status and check-in date with the portal. The Last Contact Status column will show either Recent, Delayed, Unreachable, or Never.

The ‘View Device Profile’ and ‘View Voice Profile’ buttons allow you to see a comparison between a device’s current configuration and the profile configurations assigned to the device through the portal. See the following sections for more details.

**Reporting**

Last Contact Status: **Recent** | Last Check-in: 2022-01-19T16:33:33.221Z

**Profile**

Assigned Device Profile: Oct 22-DeviceProfile | Assigned Voice Profile: Select a Voice Profile

[View Device Profile](#) | [View Voice Profile](#)

**Call Log**

Date	Source	Destination	Line	Total Duration	Billable Duration	Disposition	Call ID
2022-01-10 17:33:32	510	14804489339		00:01:10	00:01:03	ANSWERED	1641836005.4
2022-01-10 17:30:49	510	777		00:00:12	00:00:12	ANSWERED	1641835849.0
2021-11-12 16:31:37	510	777		00:00:04	00:00:03	ANSWERED	1636734696.12
2021-11-12 16:28:30	510	777		00:00:04	00:00:03	ANSWERED	1636734510.8
2021-11-12 16:28:19	510	717		00:00:08	00:00:08	ANSWERED	1636734499.4

Showing 1 to 5 of 6 entries | Page 1 of 5

The Call Log section provides a list of the device’s call information, including a unique ID number associated with each call.

## VIEWING A DEVICE PROFILE

On the Edit Device screen, select the 'View Device Profile' button under the Profile section to see current device configurations. The text in each field shows the device's current connectivity configurations, including satellite, Wi-Fi, and cellular information.

If the device configurations match the profile changes attempting to be pushed by the portal, the text underneath each field will be **BLACK**.

**RED** text means the configurations on the device are different than the assigned profile configs.

### General Settings

The screenshot displays the 'Device Profile' configuration interface. At the top, there are two input fields: 'Profile Name\*' containing 'Oct 22-DeviceProfile' and 'Version' containing '2'. Below these is a horizontal menu with tabs for 'General Settings', 'Network', 'Firewall', 'Remote Management', and 'Accessories'. The 'General Settings' tab is selected and highlighted with a blue border. Underneath, the 'SkyLink' section contains several settings: 'Max Daily Usage (COMING SOON)' with a dropdown showing '(COMING SOON)'; 'Data Routing' with a dropdown showing 'None' and 'Profile Value: None'; 'Serial Port' with a toggle switch turned on and 'Profile Value: ENABLED'; and 'Serial Baud Rate' with a dropdown showing '230,400' and 'Profile Value: NOT SET'. Two blue arrows point from the 'Serial Port' and 'Serial Baud Rate' settings to their respective 'Profile Value' labels.

### Network

## Device Profile

Profile Name\*  Version

General Settings **Network** Firewall Remote Management Accessories

### LAN

IP Address\*  Network Mask\*

Profile Value: 192.168.111.1 Profile Value: 255.255.192.0 /(18)

Primary DNS  Secondary DNS

Profile Value: 8.8.8.8 Profile Value: 8.8.8.4

### Firewall

## Device Profile

Profile Name\*  Version

General Settings Network **Firewall** Remote Management Accessories

### Firewall Profile

SkyLink by default blocks most outside (International) network traffic, and needs to be told what traffic it should allow. Firewall Profiles are sets of predefined rules that allow common network traffic. These profiles are an easy way to setup your SkyLink. Select a profile to learn more about what traffic it allows. The profile won't be applied until you click Save.

Profile Value: Social

**Remote Management**

## Device Profile

Profile Name\*

Version

General Settings

Network

Firewall

Remote Management

Accessories

Position Reports Enabled:   
Profile Value: ENABLED

Remote Management Enabled:   
Profile Value: ENABLED

Status Reports Enabled:   
Profile Value: ENABLED

Position Reports Interval:   
Profile Value: NOT SET

Remote Management Interval:   
Profile Value: NOT SET

Status Reports Interval:   
Profile Value: NOT SET

**Accessories**

## Device Profile

Profile Name\*

Version

General Settings

Network

Firewall

Remote Management

Accessories

### Accessories

Some optional accessories for SkyLink have configuration settings. This is where you can manage those settings. Remember, these accessories are optional, so unless you have one attached, any changes to these settings won't have any effect.

### Battery Pack

Shutdown Timer Enabled:

0 days

0 hrs

0 mins

0 secs

Profile Value: ENABLED Profile Value: NaN Days NaN Hrs NaN Mins NaN Secs

### Emergency Switch/Button

Emergency Reporting Enabled:

Emergency Report Interval:

Profile Value: DISABLED Profile Value: NOT SET

## VIEWING A VOICE PROFILE

On the Edit Device screen, click the 'View Voice Profile' button under the Profile section to see current voice configurations.

The Status column will show one of the following to indicate the extension's configuration state:

- 1) *Device-only* – Only the device configuration is available; no profiles have been assigned from the portal.
- 2) *Pending* – Only the profile configuration is available. This happens when a profile is pushed to the device, but the device has not checked in yet.
- 3) *Modified* – There is a difference between the device and the profile configs.
- 4) *Synched* – Both the assigned profile and device configs are synched.

### Voice Profile

Profile Name\*  
Sept16-VoiceProfile

Version  
3  
[History](#)

**SIP Extensions**

Extension	Status	Description	Inbound Line(s)	Outbound Line	Username	Password
508	Device-Only		<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Any Available</a>	511	511
510	Synched	Updated for Steve	<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Any Available</a>	510	510
511	Pending		<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Any Available</a>	511	511
512	Modified	Office Main	<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Any Available</a>	512	512
513	Synched		<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Any Available</a>	513	513
514	Synched		<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Any Available</a>	514	514
515	Synched		<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Any Available</a>	515	515

**POTS Extensions**

Region: USA / Canada  
Profile Value: USA / Canada

Extension	Status	Description	Inbound Line (s)	Outbound Line
500	Modified	POTS #1	<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Line 1</a>
501	Modified	POTS #2	<a href="#">Line 1</a> <a href="#">Line 2</a>	<a href="#">Line 2</a>

Showing 1 to 2 of 2 entries << < 1 > >> 50

↶ Cancel

## Users

Those with valid permissions can manage users throughout the system as well as view their contact information, role type, and affiliated organization here.

Under the Name column, select an existing account to make edits or tick the box and press 'Delete' to remove it. Click 'New' to add a user. **NOTE:** Only admin and account manager roles can create and modify user accounts.

Name	Contact	Role	Organization
<input type="checkbox"/> <a href="#">m.zamora</a> M Zamora	mzamora+northwind.com +1 (234) 567-8910	Admin	NorthWind Industries
<input type="checkbox"/> <a href="#">s.martinez</a> Sally Martinez	s.martinez@northwind.com +1 (123) 456-7890	Reviewer	NorthWind Industries
<input type="checkbox"/> <a href="#">t.robins</a> Tim Robins	t.robins@northwind.com +1 (987) 654-3210	Account Manager	NorthWind Industries

## EDITING A USER

On the Edit User screen, fill in the mandatory fields and use the toggle slider to enable or disable user login. The Organization drop-down menu allows you to match the user with their affiliated org. The Username and Email fields are view only.

### Edit User

User Role\* Organization

Reviewer NorthWind Industries

Admin users can create other Admin users.

Is Enabled

Disabling a user will prevent them from logging in.

#### Identity

Name\* Username\*

Sally Martinez s.martinez

#### Contact

Email\* Phone\*

s.martinez@northwind.com +1 (123) 456-7890

Address

123 Main Street.  
Springfield, CA 1234

Save Cancel Delete

**NOTE:** When creating a user for the first time, they will receive an email with steps to change their password. They will then be sent a verification ID to finish setting up their account.

## Profiles

This screen allows for easy fleet device management by enabling you to remotely create and store profiles that match your use cases for devices in the field. After profiles are applied and devices are active in the field, you can view differences between the profile and any config changes made locally.

Once a device or voice profile is created, you can update it and a new version will be created. If the profile is already assigned to one or more devices, you will be asked, "Update ALL Devices?" If you choose 'Yes,' the profile will save and sync with the units. If you select 'No,' the profile will not save.

<input type="checkbox"/>	Name <small>⌵</small>	Org <small>⌵</small>	Created <small>⌵</small>
<input type="checkbox"/>	Oct 22-DeviceProfile	NorthWind Industries	10/22/2021
<input type="checkbox"/>	Oct 24-Ntwk Profile	NorthWind Industries	10/22/2021
<input type="checkbox"/>	Oct 25-Frwl Profile	NorthWind Industries	10/22/2021

**NOTE:** The profiles shown on the Device tab and the Voice tab are the latest versions. Click on a profile to find its version history and choose a previous version if desired.

### CREATING DEVICE PROFILES

When you navigate to the Profiles screen, the Device tab is shown by default with a list of all device profiles currently in the system. Press 'New' to add a profile or select an existing one from the Name column to make edits.

You will then be directed to either the Add Device Profile or Edit Device Profile screen; each screen has 5 tabs: General Settings, Network, Firewall, Remote Management, and Accessories.

**\*\*\*Remember to click the 'Save' button at the bottom of each tab to apply any changes. \*\*\***

### General Settings

This first tab allows you to make configurations related to device data usage and identifying info.

## Add Device Profile

Profile Name\*

Profile Name is required.

General Settings | Network | Firewall | Remote Management | Accessories

### SkyLink

Max Daily Usage (COMING SOON)  
(COMING SOON)

Data Routing  
None

Serial Port

Serial Baud Rate  
230,400

Device Password (COMING SOON)  
(COMING SOON)

Several fields contain drop-down menus for additional customization.

Slide the toggle buttons under the Satellite, Wi-Fi, and Cellular sections to enable or disable connectivity. Some fields in these sections will be pre-populated.

### Satellite

Satellite Enabled

Data Enabled

### Wi-Fi

SSID  
[Empty field]

Mode  
2.4 GHz

Channel  
Auto

Security  
WPA2-PSK

Password  
[Empty field]

### Cellular

APN  
[Empty field]

Username  
[Empty field]

Password  
[Empty field]

Save Cancel

## Network

The Network tab enables you to input LAN and DHCP Server information into the fields. Select a Network Mask and Lease Validity date from each field's drop-down menus for further customization.

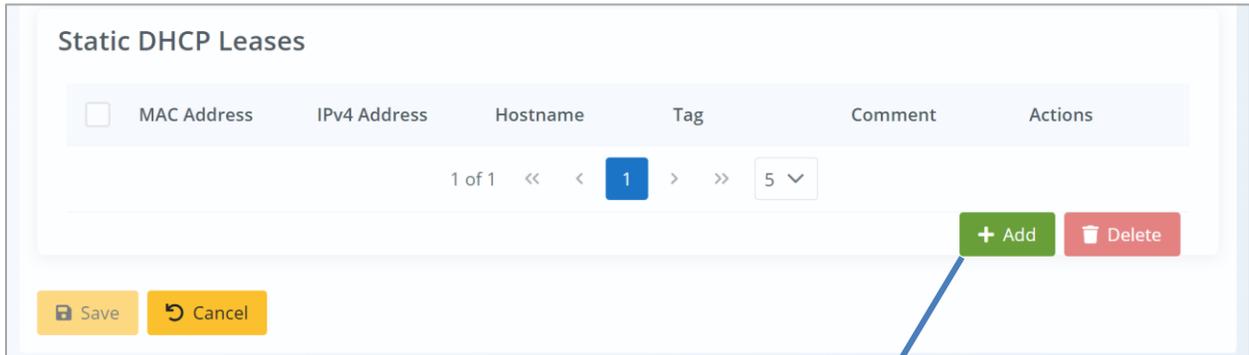
**NOTE:** All fields in this tab will be pre-populated.

The screenshot shows the 'Add Device Profile' form with the 'Network' tab selected. The 'Profile Name' field contains 'Sept6-DeviceProfile'. Below the tabs are the 'LAN' settings: IP Address (192.168.111.1), Network Mask (255.255.255.0 (/24)), Primary DNS (8.8.8.8), and Secondary DNS (8.8.4.4).

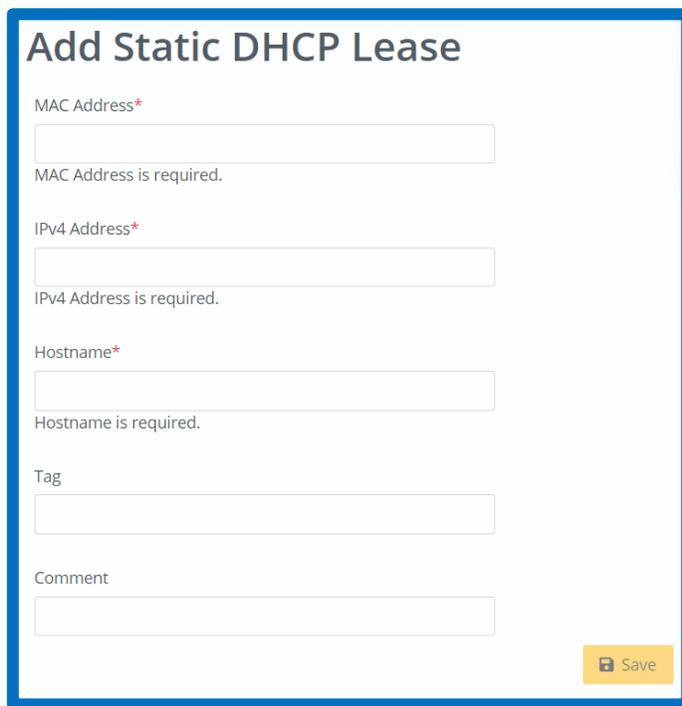
Use the toggle slider in this section to enable or disable the DHCP server.

The screenshot shows the 'DHCP Server' section with a toggle switch turned on. The 'DHCP Start Range' is 192.168.111.50 and the 'DHCP End Range' is 192.168.111.249. The 'Lease Validity' is set to 1 day.

At the bottom of the screen, you can add, edit, and delete Static DHCP leases. Once created, the new Static DHCP lease will appear in the table below.



The screenshot shows a table titled "Static DHCP Leases". The table has columns for "MAC Address", "IPv4 Address", "Hostname", "Tag", "Comment", and "Actions". Below the table, there are navigation controls showing "1 of 1" items, with a blue box around the number "1". To the right of the table are two buttons: a green "+ Add" button and a red "Delete" button with a trash icon. At the bottom left of the interface are two yellow buttons: "Save" and "Cancel".



The screenshot shows a form titled "Add Static DHCP Lease". The form contains the following fields and labels:

- MAC Address\* (with a red asterisk) - Input field with error message: "MAC Address is required."
- IPv4 Address\* (with a red asterisk) - Input field with error message: "IPv4 Address is required."
- Hostname\* (with a red asterisk) - Input field with error message: "Hostname is required."
- Tag - Input field
- Comment - Input field

A yellow "Save" button is located at the bottom right of the form. A blue arrow points from the "+ Add" button in the table screenshot above to this form.

## Firewall

Here you can use the drop-down menu to choose between sets of predefined rules (referred to as Firewall Profiles) that enable or disable common network traffic.

The screenshot shows the 'Add Device Profile' configuration page. At the top, there is a 'Profile Name\*' field with a validation message 'Profile Name is required.' Below this are tabs for 'General Settings', 'Network', 'Firewall' (which is selected and highlighted with a blue border), 'Remote Management', and 'Accessories'. Under the 'Firewall' tab, there is a section titled 'Firewall Profile' with explanatory text: 'SkyLink by default blocks most outside (Internet) network traffic, and needs to be told what traffic it should allow. Firewall Profiles are sets of predefined rules that allow common network traffic. These profiles are an easy way to setup your SkyLink. Select a profile to learn more about what traffic it allows. The profile won't be applied until you click Save.' Below the text is a dropdown menu currently showing '4. Chatty' and a help icon.

This section provides a description of the selected Firewall Profile.

The screenshot shows the 'Description' section for the selected Firewall Profile. It states: 'Allows network traffic as Weather and adds the following chat apps (text only):'. Below this text, there are six chat app icons arranged in two rows: Signal, Telegram, WeChat in the first row, and WhatsApp, Wickr, Wire in the second row.

In the Advanced Rules section, press 'Add' to create custom firewall rules. We recommend contacting the Blue Sky Network support team for assistance.

The screenshot shows the 'Advanced Rules' section. It includes a warning note: 'Note: We only support Port Forwarding.' Below the note is a table with the following columns: Type, Source, Destination, Source Port, Dest Port, Protocol(s), Comments, and Actions. The table currently contains one row, and the page number '1 of 1' is displayed. At the bottom right of the table area are '+ Add' and 'Delete' buttons. At the very bottom of the section are 'Save', 'Delete', and 'Cancel' buttons.

**NOTE:** Please see the SkyLink User Guide for more information on using Firewall Profiles and creating custom rules.

### Remote Management

Enable and configure your reporting preferences on this tab by using the toggle sliders and drop-down menus. Most intervals can be customized.

**Add Device Profile**

Profile Name\*  
Sept6-DeviceProfile

General Settings   Network   Firewall   **Remote Management**   Accessories

Position Reports Enabled:	<input checked="" type="checkbox"/>	Position Reports Interval:	24 hours
Remote Management Enabled:	<input checked="" type="checkbox"/>	Remote Management Interval:	24 hours
Status Reports Enabled:	<input checked="" type="checkbox"/>	Status Reports Interval:	24 hours
Call History Enabled:	<input checked="" type="checkbox"/>	Call History Interval:	24 hours
		Config Sync Interval:	24 hours

### Accessories

If you are using an optional SkyLink accessory (e.g., the Battery Pack or Emergency Switch/button), you can enable and configure capabilities here.

**Add Device Profile**

Profile Name\*  
Sept6-DeviceProfile

General Settings   Network   Firewall   Remote Management   **Accessories**

**Accessories**

Some optional accessories for SkyLink have configuration settings. This is where you can manage those settings. Remember, these accessories are optional, so unless you have one attached, any changes to these settings won't have any effect.

**Battery Pack**

Shutdown Timer Enabled:

0 days   0 hrs   0 mins   0 secs

**Emergency Switch/Button**

Emergency Reporting Enabled:

Emergency Report Interval: 1 minute

## CREATING VOICE PROFILES

On the Profiles screen, select the Voice tab for a list of all voice profiles, including their assigned organization and creation date. Click 'New' to create a profile or choose an existing one to edit a SIP or POTS extension.

The screenshot shows the 'Profiles' screen with the 'Voice' tab selected. At the top, there are three buttons: '+ New' (green), 'Delete' (red), and 'Clear' (blue). To the right is a search bar labeled 'Search keyword'. Below these is a table with the following data:

<input type="checkbox"/>	Name ▾	Org ▾	Created ▾
<input type="checkbox"/>	Dec6-VoiceProfile	NorthWind Industries	12/06/2021
<input type="checkbox"/>	Oct 22-VoiceProfile	NorthWind Industries	10/22/2021
<input type="checkbox"/>	Oct 22-VoiceProfile	NorthWind Industries	10/22/2021
<input type="checkbox"/>	Oct 22-VoiceProfile	NorthWind Industries	10/22/2021

There are 20 SIP and 2 POTS extensions that can be configured. By default, the first SIP extension (shown below as 510) is set to ring to both lines, the next 9 extensions allow calls to Line 1 only, and the following 10 to Line 2 only.

Click on a line under the Extension column to make edits, then press 'Save.' You can also provide a description in the last field.

### Create Voice Profile

Profile Name\*  
Sept6-VoiceProfile

#### SIP Extensions

Extension	Description	Inbound Line(s)	Outbound Line	Username	Password
510		<input type="button" value="Line 1"/> <input type="button" value="Line 2"/>	<input type="button" value="Any Available"/>	510	510
511		<input type="button" value="Line 1"/> <input type="button" value="Line 2"/>	<input type="button" value="Any Available"/>	511	511
512		<input type="button" value="Line 1"/> <input type="button" value="Line 2"/>	<input type="button" value="Any Available"/>	512	512

#### SIP Extension

Extension\*

Inbound Line(s)  
 Line1  Line2

Outbound Line\*

Username\*

Password\*

Description

In the POTS Extensions section, use the drop-down menu to select region-specific dial tones, ringing tones, etc. The first extension (shown below as 500) is set to ring to Line 1 only and the second extension is set to ring to Line 2 only by default. Click on an extension to make edits.

**POTS Extensions**

Region: USA / Canada

Clear Search keyword

Extension	Description	Inbound Line (s)	Outbound Line
500	POTS #1	Line 1 Line 2	Line 1
501	POTS #2	Line 1 Line 2	Line 2

Showing 1 to 2 of 2 entries << < 1 > >> 50

Save Cancel

**POTS Extension**

Extension\*

501

Inbound Line(s)

Line1  Line2

Outbound Line\*

Line 2

Description

POTS #2

Save

## Firmware

Use this screen to install any available firmware versions on your devices. The Release Notes column provides an overview of the features included in each release.

**NOTE:** We recommend using an ethernet connection to upgrade firmware.

### Firmware

Check and Download all available firmware versions for your SkyLink device.

Version	Release Date	SHA256 Sum	Release Notes	Download
2.19	08/10/2022	d0021299d0f1bbeaf132bd3a7447ed9b40cd971eee582a85b0ac77d405254f25	<ul style="list-style-type: none"> <li>Fixed a bug with cloud call history sync for large call logs</li> <li>Added open-source license information to the UI</li> <li>Added Gmail and Apple icloud email to mail and social firewall profile</li> <li>Important OS level security fixes and enhancements</li> </ul>	<a href="#" style="background-color: #007bff; color: white; padding: 5px 10px; text-decoration: none; border-radius: 3px;">Download</a>
2.18	07/05/2022	a05d03c1c8d37519772ca66c8d21bbda65024504a68672e72d9e673f9e0bdcd8	<ul style="list-style-type: none"> <li>Added SOS Reporting to cloud/skyrouter</li> <li>Updated firewall config to improve functionality for certain weather apps</li> <li>Various OS level security enhancements and bug fixes</li> <li>Various UI improvements</li> </ul>	<a href="#" style="background-color: #007bff; color: white; padding: 5px 10px; text-decoration: none; border-radius: 3px;">Download</a>

## Help

This screen contains frequently asked questions pertaining to the SkyLink device and Device Interface. FAQs related to SkyLink Cloud Services can be found at the end of this user guide.

### Frequently Asked Questions

- > 1. Why can I not connect to the SkyLink WiFi?
- > 2. What are the cellular modem options? Can they be exchanged?
- > 3. Which WiFi frequencies are used for the SkyLink Data Gateway?
- > 4. I am not receiving incoming call notifications on SIP extensions.
- > 5. Why did my device not power on after I connected the power cable?
- > 6. My kit came with a Power Over Ethernet (POE) power source. What is it and how do I use it?
- > 7. Can I use an alternative cellular antenna?

## SKYLINK SPECS, INSTALLATION, & CAPABILITIES

### Technical Specifications

#### CONNECTIVITY

##### Cellular

- LTE-A CAT 6 module with M.2 form factor
- Supports LTE-A carrier aggregation
- Worldwide LTE-A and 3G UMTS / HSPA(+) coverage
- 300 Mbps receive (DL) / 50 Mbps transmit (UL)
- User-accessible SIM

##### Iridium Certus® 100

- Simultaneous voice and IP data
- 88 Kbps receive (DL) / 22 Kbps transmit (UL)
- Frequency: 1616 MHz – 1626.5 MHz
- 2 high-quality voice channels
- User-accessible SIM

##### Positioning

- Multi-constellation GNSS receiver in cellular module:
  - GPS
  - GLONASS
  - BeiDou
  - Galileo
- 33 tracking channels
- 99 acquisition channels
- 210 PRN channels
- Anti-jamming and multi-tone active interference canceller
- < 2.5 m CEP horizontal position accuracy

##### WiFi

- 2.4 / 5 GHz
- IEEE 802.11 ac / a / b / g / n
- Certifications with multiple antennas:
  - FCC (USA)
  - IC (Canada)
  - ETSI (Europe)
  - Giteki (Japan)
  - RCM (AU/NZ)

#### MECHANICALS

##### Size & Weight

- Dimensions: 8.0 x 5.0 x 1.5 in. (12.7 x 20.3 x 3.2 cm)
- Weight: 1.6 lbs. (0.7 kg)

##### LEDs

- Single multi-purpose, multi-color LED:
  - Green = Initial Power On
  - Red = Unit in Bootloader Mode
  - Blue Blink = OS is Booting
  - Blue Steady = Device is Ready
  - Red Blink = Iridium Firmware Upgrade
  - Blue Blink = SkyLink Firmware Upgrade

##### Connectors

- 1x cellular SMA female connector
- 1x Iridium SMA female connector
- 2x M12 connectors (1x Ethernet & Power, 1x USB & RS232)

#### OPERATING PARAMETERS

##### Electrical

- External power:
  - 10 – 34 VDC
  - POE
- Power consumption:
  - 7W nominal power
  - 18W peak power

##### Environmental

- Operating temperature range: -40°C to +70°C
- Storage temperature range: -40°C to +85°C
- Operating humidity range: ≤ 75% RH
- Storage humidity range: ≤ 93% RH

##### Regulatory Standards & Compliance

- US (FCC)
- EU (CE MARK)
- Canada (IC)
- IP65 rating
- Brazil (ANATEL)
- DO-160G

## Software Specifications

### CONFIGURATION

- Local configuration of SkyLink devices using WiFi or Ethernet
- Remote configuration of SkyLink devices, features, and settings
- Bulk device configuration
- DHCP server, client, or static IP address
- WiFi SSID and password
- POTS and SIP voice extensions

### Internet

- Cellular internet
- Satellite internet
- Ability to fail-over
- Ability to disable satellite data but not voice communication

### Firewall

- Firewall Profiles for quick and easy firewall setup
- Advanced rules that allow customers to add functionality beyond the set profiles

### Voice

- Support for up to 2 FXS / FXO USB adapters
- Support for up to 20 SIP clients
- Call logs

### REPORTING

- Position and event reporting
- Device data usage
- Network-wide data usage
- Data usage by transmission type
- Data usage by device type
- Device health monitoring
- Network-wide health monitoring
- Device diagnostics
- Customizable report rate

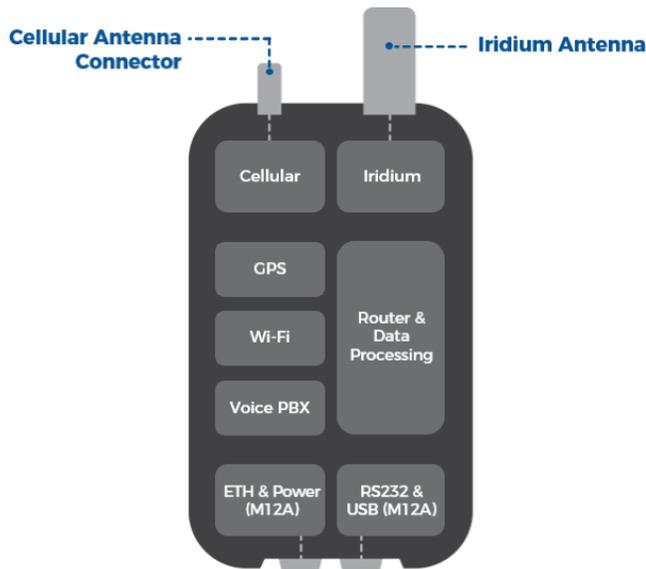
### MONITORING

- Device CPU and modem temperatures in real time
- Modem signal strengths in real time
- Modem data usage
- Least-cost routing status
- Voice call logs
- Device location monitoring
- Device health monitoring

### Device Management

- View status and customize settings in a web UI
- Firmware upgrade
- Factory reset

## Diagram



## Installation

Mount the Iridium-approved antennas with an unobstructed, full view of the sky and away from other radiating antennas that may cause interference. See the SkyLink Installation Guide for suggested device/antenna mounting locations and detailed steps on equipment installation.

## Troubleshooting

The power LED indicator on the top panel of the unit cycles through multiple colors as it loads:

- Green = Initial Power On
- Red = Unit in Bootloader Mode
- Blue Blink = OS is Booting
- Blue Steady = Device is Ready
- Red Blink = Iridium Firmware Upgrade
- Blue Blink = SkyLink Firmware Upgrade

If the power LED indicator is stuck on red, remove the power cable from the power port and wait ~60 seconds, until the light fades from green to dark. Once the unit has completely shut down, reapply power. If the device continues to display red, please contact our support team.

## SkyLink Capabilities

The SkyLink device is able to make calls, connect to the internet, and support AT Command Set emulation. Please see the SkyLink User Guide for detailed information on these capabilities.

## PRODUCT WARRANTY

### **PLEASE READ -- THIS DOCUMENT CONTAINS IMPORTANT NOTICES, WARRANTY INFORMATION, AND LIMITATIONS ON YOUR RIGHTS.**

Upon the signed verification of the attached Quotation (see Equipment Purchase & Service Agreement Terms & Conditions) by the Customer (“**Customer**”), the Quotation and these Terms and Conditions shall constitute a binding contract (“**Contract**”) between Customer and Blue Sky Network, LLC, a Delaware limited liability company (“**Blue Sky**”) for the purchase of the products and services described in the Quotation.

### **Product Terms and Conditions**

Blue Sky Network, LLC (“Blue Sky”) warrants that the Products it manufactured shall be free from defects in materials and workmanship. This warranty (i) shall apply to Customer (as named in the Quotation) only and no other and (ii) shall not apply to any Product which is not stored, handled, installed, or used in strict accordance with Blue Sky’s specifications and instruction manuals, or which is altered without Blue Sky’s express consent, or which has been subject to misuse, negligence, or accident.

Blue Sky’s sole obligation shall be to replace or repair defective Products covered by this warranty provided that Customer returns such defective Product within two (2) years of the date of the Quotation. Customer hereby agrees that the replacement or repair of defective Products shall be Customer’s sole remedy in the event of a breach of warranty and shall be in lieu of any other remedy. Except as provided above with respect to Products only, **Blue Sky makes no warranties relating to the Products (see section on Warranty Disclaimer/Limitation of Liability).**

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Blue Sky’s only duties in connection with the sale of the Products shall be to honor the limited warranty for the Products as set forth herein. To the extent assignable, any manufacturer warranty for Products other than the Products shall be assigned by Blue Sky and passed through to the Customer. Blue Sky’s sole liability, if any, for loss or damage arising out of mistakes, omissions, interruptions, errors, or any other causes relating to the services, INCLUDING THE NEGLIGENCE OF

BLUE SKY, shall be limited to the credit for service interruption for each separate period of interruption as described in the section on Availability of Service.

EXCEPT FOR THE FOREGOING, CUSTOMER WAIVES ANY RIGHT OF RECOVERY AGAINST BLUE SKY FOR ANY CLAIMS, DEMANDS, ACTIONS, LIABILITIES, LOSSES, COSTS OR EXPENSES (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES OR COSTS) ("**CLAIMS**") BY OR DUE TO THIRD PARTIES AND SUFFERED BY CUSTOMER, DIRECTLY OR INDIRECTLY RELATING TO OR ARISING FROM THE NEGLIGENCE OF BLUE SKY OR THE MANUFACTURE, DISTRIBUTION, SALE, USE OR INSTALLATION OF ANY PRODUCT OR THE PROVISION OF THE SERVICES. CUSTOMER SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS BLUESKY AGAINST ANY AND ALL CLAIMS BY THIRD PARTIES RELATED TO OR ARISING FROM THE SALE OF THE PRODUCTS OR PROVISION OF THE SERVICES DESCRIBED HEREIN. The provisions of this section shall survive termination of services.

SOME STATES DO NOT ALLOW DISCLAIMERS OF IMPLIED WARRANTIES OR LIMITS ON REMEDIES FOR BREACH; THEREFORE, THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY. THIS CONTRACT SETS FORTH SPECIFIC LEGAL RIGHTS AND CUSTOMER MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

## FREQUENTLY ASKED QUESTIONS

The following FAQs pertain only to SkyLink Cloud Services. Questions about SkyLink and the Device Interface can be found in the SkyLink User Guide, or the Help screen in the Cloud Services portal.

If you are still unable to resolve your issue, please contact the Blue Sky Network support team and we will be happy to help!

### **1. What information can users see and modify?**

- Users in a given organization can only see information in their organization and any sub-organizations (i.e., resellers or customers). Please refer to the [User Permissions](#) chart to see each role and their capabilities.

## TECHNICAL SUPPORT

Blue Sky Network is committed to providing the highest level of service and support. If you have any questions or concerns, please feel free to contact us by email or phone; contact information is available at the bottom of this page. For self-help, please visit <https://blueskynetwork.com/support>.

Thank you for choosing Blue Sky Network!



# Blue Sky Network

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