SKYLINK

User Guide

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SkyLink

User Guide

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ABOUT THIS USER GUIDE

Thank you for purchasing the SkyLink device! This easy-to-read User Guide is organized based on the steps needed to log in to and navigate the SkyLink Web Interface for singular device use. For information on using the SkyLink Online Portal, please see the SkyLink Cloud Services User Guide.

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:

- Connecting to the SkyLink device WiFi
- Changing your SkyLink device name and/or WiFi password
- Updating SkyLink and Iridium modem firmware
- Using your SkyLink device: making calls, connecting to the internet, and more
- Troubleshooting
- Frequently Asked Questions

ABOUT SKYLINK

Introduction to SkyLink

SkyLink Cloud Services by Blue Sky Network is a comprehensive analytics platform specifically engineered to capture and disseminate mission-critical information for remote, mobile, and global operations. With customizable reports, activity alerts, and dashboards that work around the clock, important details are recorded in real-time for complete visibility anytime and anywhere in the world.

The SkyLink Data Gateway and its Communications Companion work seamlessly with SkyLink Cloud Services, offering reliable connectivity for end-to-end sensor reporting, asset utilization, IoT/M2M monitoring, and two-way messaging. This small-form, multi-stack hardware is designed for any fixed-mount, portable, or mobile application and offers a range of service configurations.

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

Compatibility and System Requirements

To access the SkyLink Web Interface, you will need 1) an internet connection and 2) a web browser that supports HTML5.

The SkyLink Web Interface has been tested with the following recommended browsers:

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

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GETTING STARTED

Connecting to Device WiFi

A label containing a QR code with a WiFi access point can be found on both the box of your SkyLink Data Gateway and on the back panel of the device itself. It is recommended that a wide screen device (e.g., laptop, PC, or tablet) be used for the initial configuration.

After properly installing and powering on the device (please see the SkyLink Installation Guide), you can connect to WiFi through one of two ways:

Option 1: Use a mobile device or tablet to scan the QR code. Your phone/tablet will then be automatically connected to the WiFi. **NOTE**: If using a cellular device, it may be helpful to first switch into airplane mode before connecting to the SkyLink WiFi.

Option 2: Use the WiFi SSID and password found on the label.

Connecting to the Network through Ethernet

If using an ethernet cable with your SkyLink device, simply plug the ethernet cable into the appropriate power source (e.g., a wall) and your device will automatically be configured via DHCP.

Connecting to the SkyLink Web Interface

Open a web browser and type in the SkyLink device's IP address: **192.168.111.1** into the address bar, then press the 'enter' key on your keyboard.

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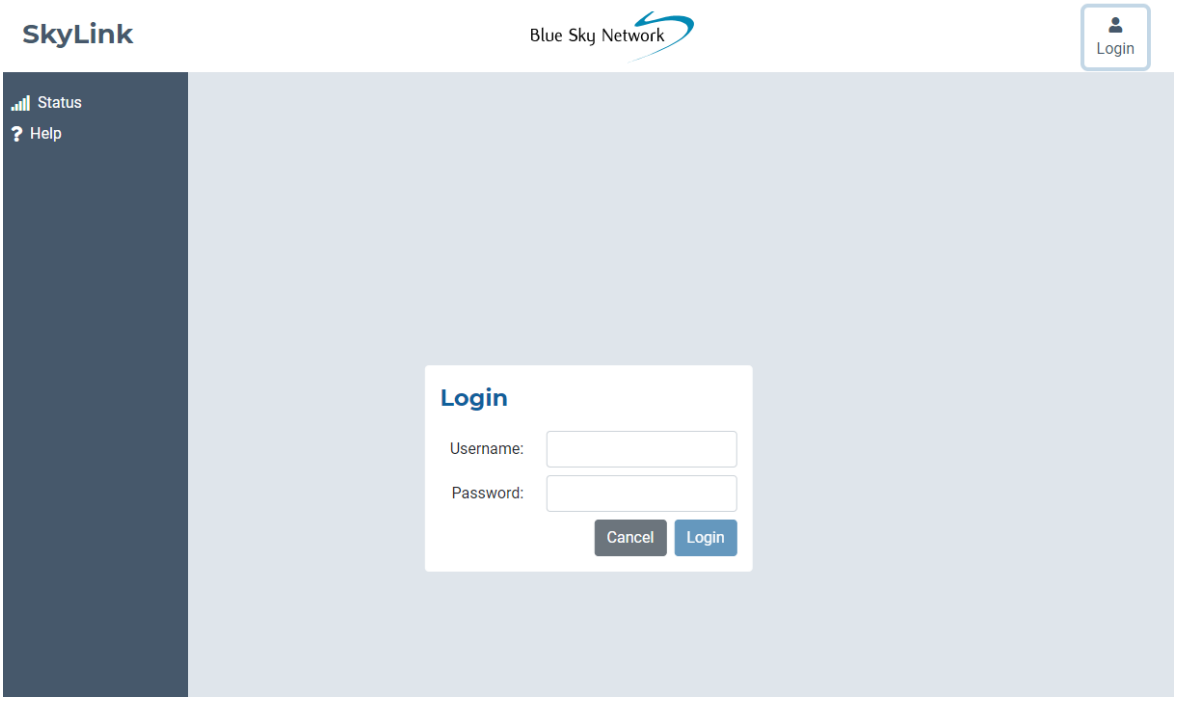
SKYLINK WEB INTERFACE

After typing in the device's IP address, you will be directed to the SkyLink Web Interface where you can view, configure, and manage your device settings. The default User ID and Password are both 'admin.'



Overview

The SkyLink Web Interface has several tabs displayed on the left-hand side for easy navigation to screens containing important information about your device. In order, the tabs are:

- Status
- General Settings
- Network
- Firewall
- Calls
- Voice Extensions
- Advanced
- Remote Management
- Diagnostics
- Help

To hide the tabs on the webpage, click on the triple bars above the tab listing. Click the 'Logout' button located on the top right-hand corner when you are ready to exit the SkyLink Web Interface.

The following sections describe the information that can be found on each screen as well as the configurations that can be made.

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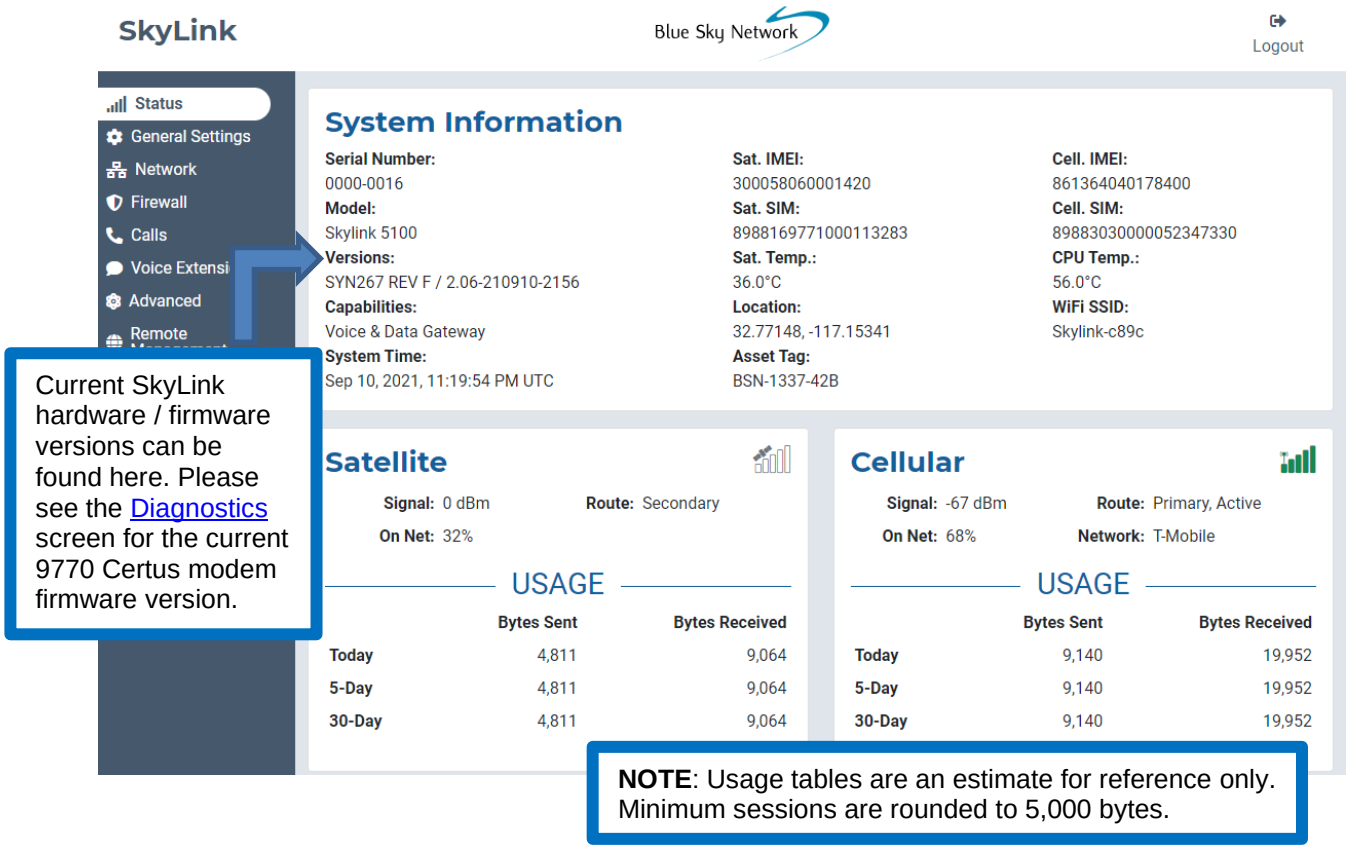
Status

When accessing the SkyLink Web Interface, you will automatically be directed to the Status screen. Here you will find information about your system as well as your satellite and cellular data usage.



SYSTEM INFORMATION

These three columns contain identifying information about your SkyLink device, such as its serial and model number, current hardware and firmware versions, and capabilities. It also includes satellite and cellular IMEI/SIM card numbers and current temperatures.

SATELLITE & CELLULAR INFORMATION

These sections display the satellite and cellular modems' signal strength and data information. The on net percent is the current percentage of data that has crossed the interface. It is calculated by adding satellite and cellular usage totals and dividing that number of bytes by the interface's number of bytes.

Each section shows a table with your device's 5-, 30-, and current day's data usage in terms of bytes sent and received.

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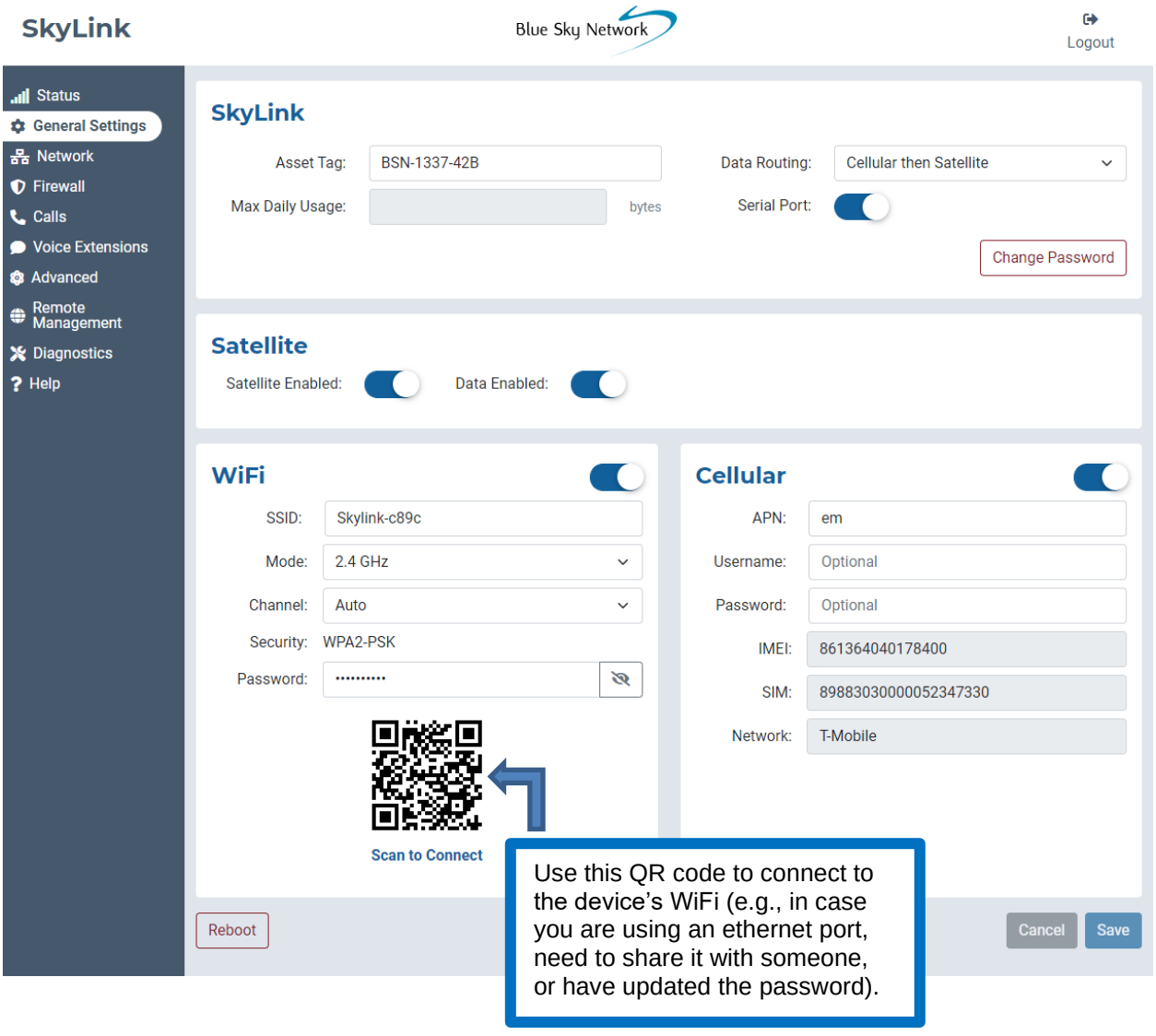
General Settings

This screen allows you to make setting configurations such as renaming your SkyLink device, changing the password, and turning your satellite, cellular, and WiFi capabilities on and off. Click the 'Reboot' button in the bottom left-hand corner of the screen to restart your device, if needed.

***Remember to click the 'Save' button in the bottom right-hand corner to update any changes. ***



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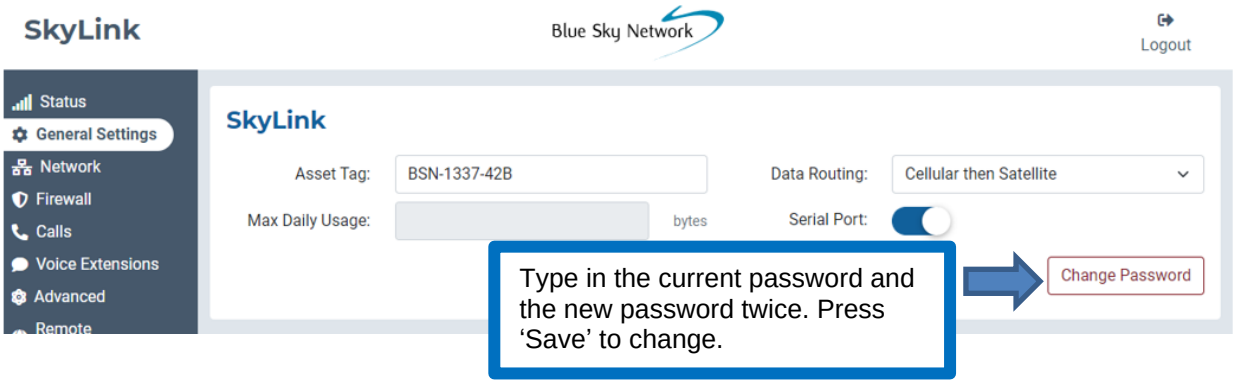
SKYLINK

Edit your device name in the Asset Tag field. Use the Data Routing drop-down menu to prioritize data routing (Satellite Only, Cellular Only, Cellular then Satellite). Changes are applied immediately.

NOTE: Iridium QoS (also called Iridium secondary data flows) are not supported on Certus 100; therefore, BSN cannot offer per-stream priorities or VLANs over the Iridium link.



Set a maximum limit for the SkyLink device's daily data usage in the Max Daily Usage field. The Serial Port toggle button enables or disables the RS232 serial communication channel.

SATELLITE

The toggle button on the left allows you to switch satellite capabilities on and off. Once your satellite and cellular SIM cards are activated, you can freely switch back and forth between the two. The toggle button to the right will enable or disable data transferring.

NOTE: Satellite internet connection supports messaging apps, IoT data transfer, and mobile-optimized web surfing (visit Iridium.com/mobile for a list of mobile-optimized sites). It is not intended for general web browsing or high bandwidth applications.

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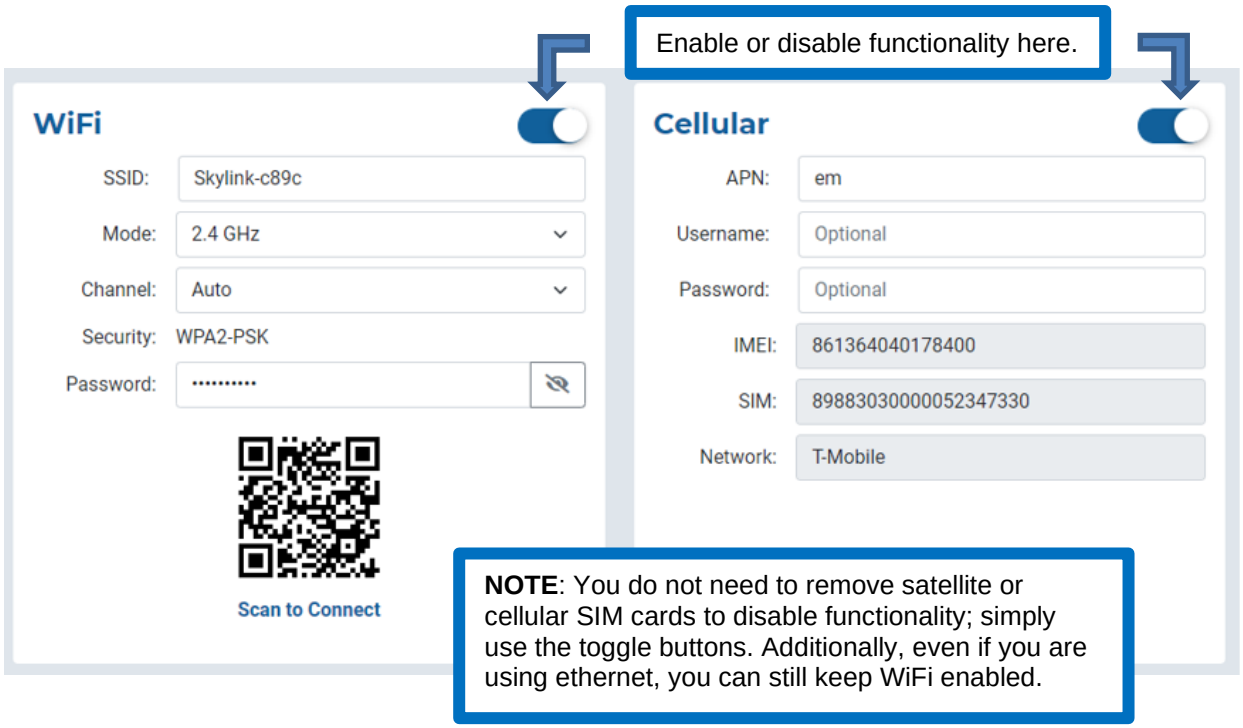
WIFI & CELLULAR

Once you are connected to the SkyLink device's WiFi, and cellular is enabled, you can use your personal device to browse any website and use all of your applications.

The default mode (out-of-box) is 'all internet OFF'—users must explicitly enable internet access. You also have the option to keep the built-in WiFi disabled and connect your own WiFi to an existing ethernet port (e.g., in a building or ship-wide).

Each section displays identification information, including WiFi SSID and cellular APN (your network service provider), IMEI, SIM, and network name.



The WiFi section allows you to edit the SSID, Mode, Channel, and randomly generated Password field. It also contains a scannable QR code for automatic connectivity. When set to 2.4GHz, the Mode field will default to the radio channel with the strongest WiFi signal, and you can select among 11 channels. Switching it to 5GHz will provide you with a new set of channels to choose from.

In the Cellular section, you can fill in the optional Username and Password fields. **NOTE**: Some carriers require that you create a Username and Password. Please contact your carrier if you have questions.

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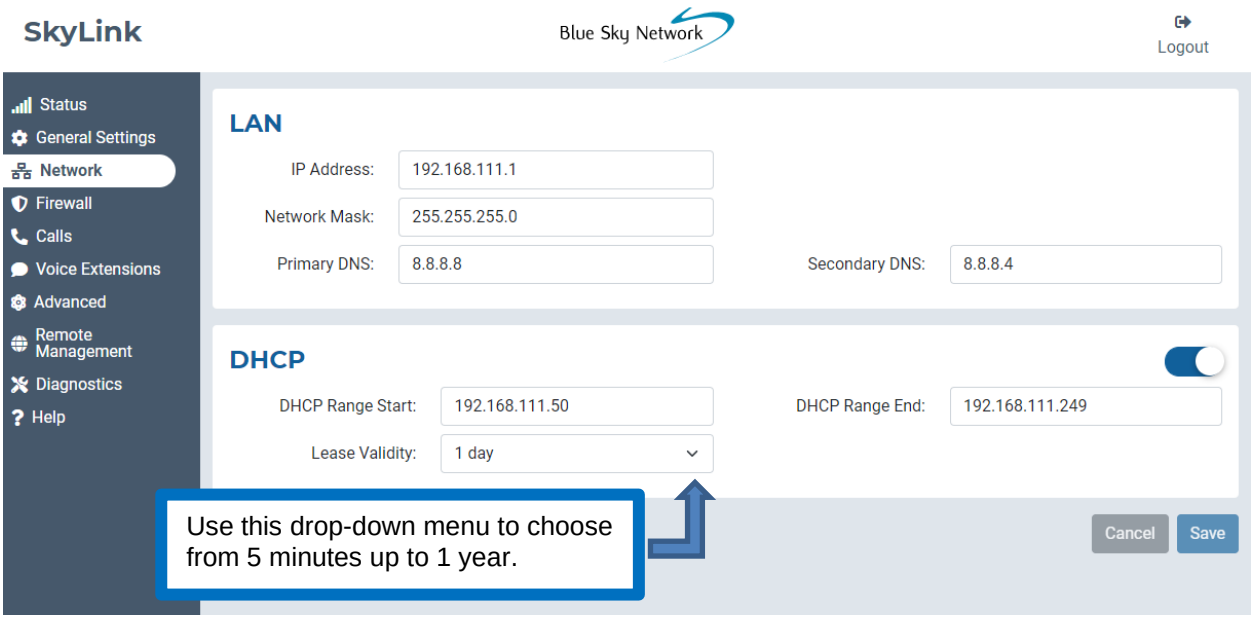
Network

This screen provides multiple options to configure your network settings.



LAN

Here you can change the gateway or internal IP address on your network and also set primary and secondary DNS addresses.

DHCP

In addition to choosing your lease validity, this section allows you to configure a range of IP addresses that you would like to use.

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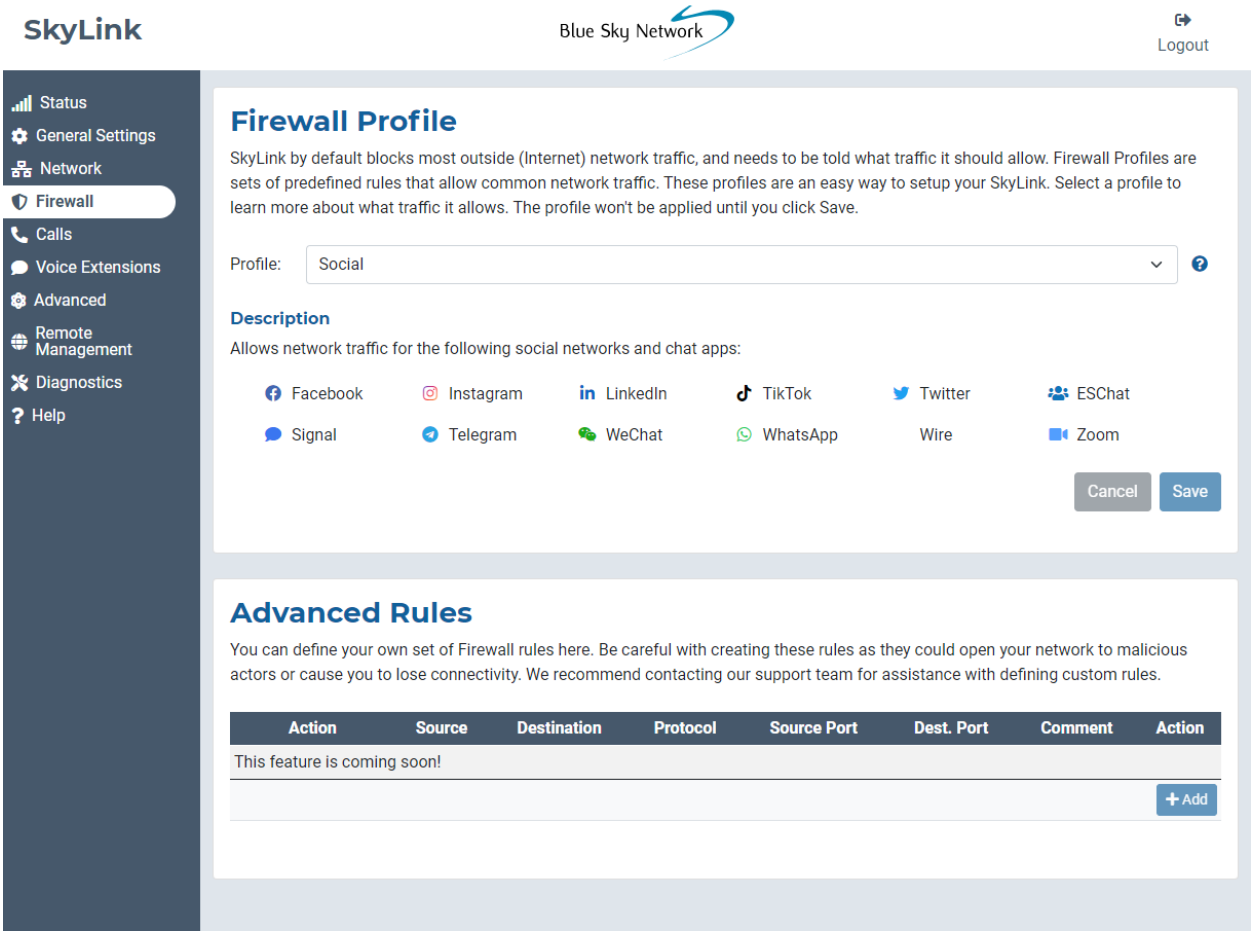
Firewall

Here you can enable or disable applications from connecting to the internet by choosing from a compiled list of predefined rules (shown on the screen as “Firewall Profile”) or by creating your own set. We recommend contacting the Blue Sky Network support team for assistance with custom rule creation.

NOTE: When using the Firewall Profile, complete functionality may not be available on all apps (e.g., WhatsApp messaging will be unblocked, but not WhatsApp voice calling). These restrictions can be unblocked by creating a rule in the Advanced Rules section. You can also try making configurations in the app itself or reach out to your corporate MDM platform.



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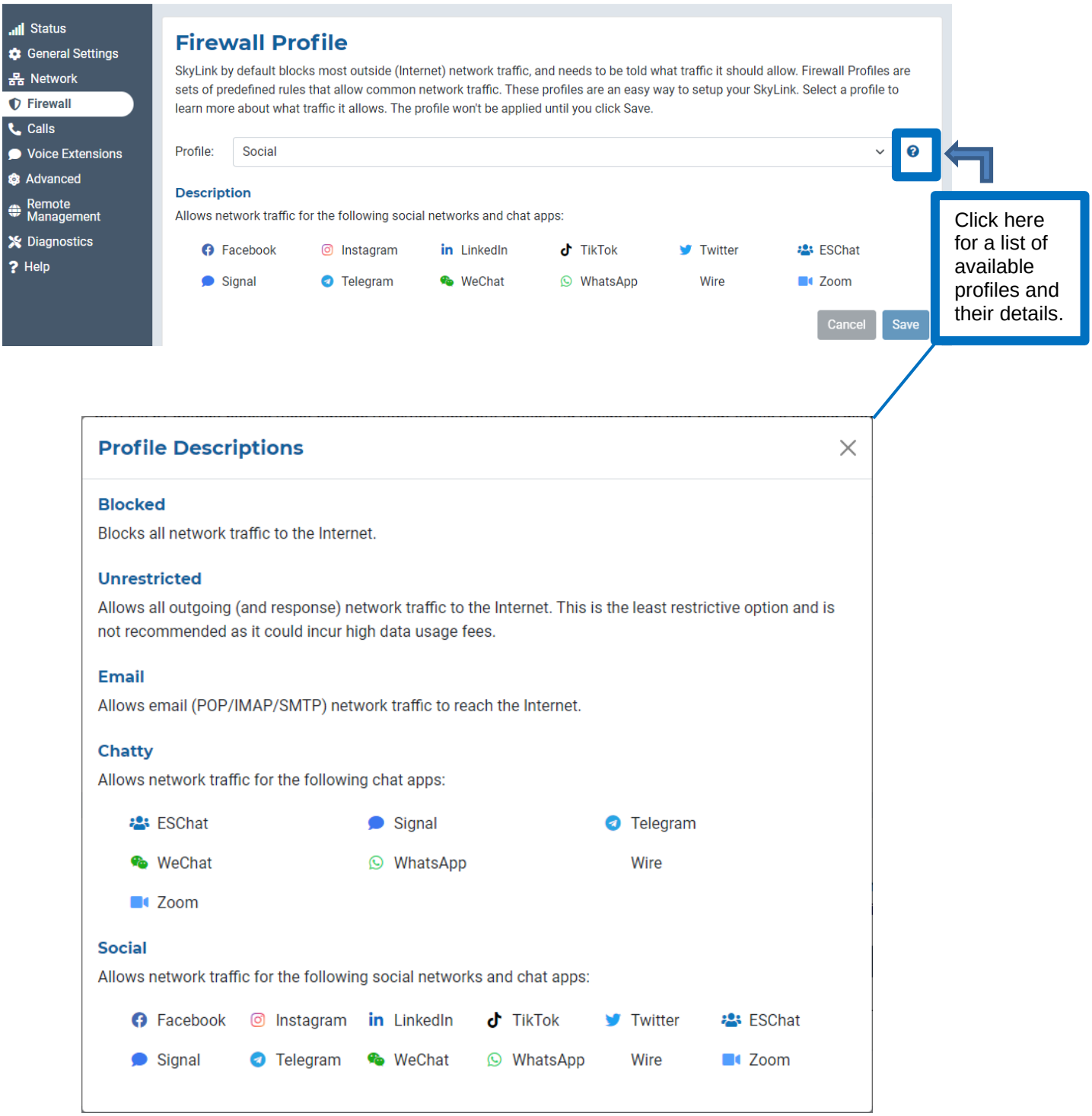
FIREWALL PROFILE

This section shows the current profile and its description, including a list of affiliated apps, if applicable. Use the drop-down menu to choose between profile options and click ‘Save’ to apply its rules.



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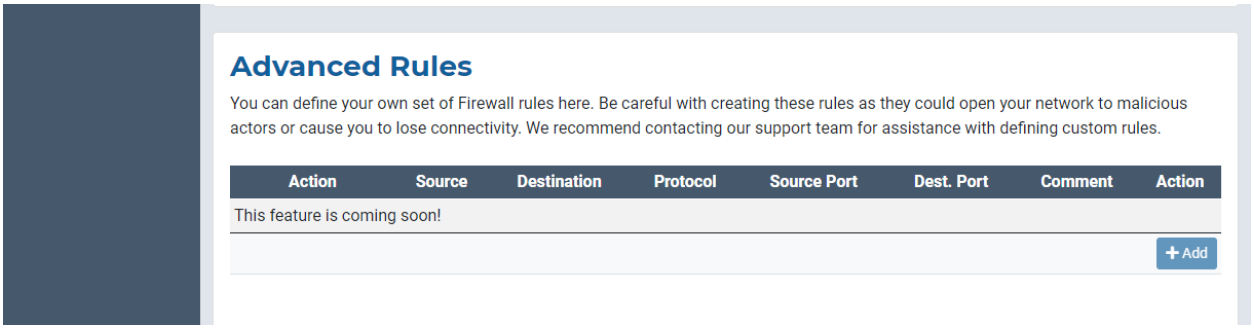
ADVANCED RULES

The SkyLink Web Interface also allows for custom rules to be created. This section shows all custom rules that have been defined and allows the user to add a new rule or make edits to an existing one. You can also block all network traffic from an app affiliated with a certain profile.



NOTE: Use the SkyLink Online Portal to apply custom rules to a fleet of SkyLink devices.

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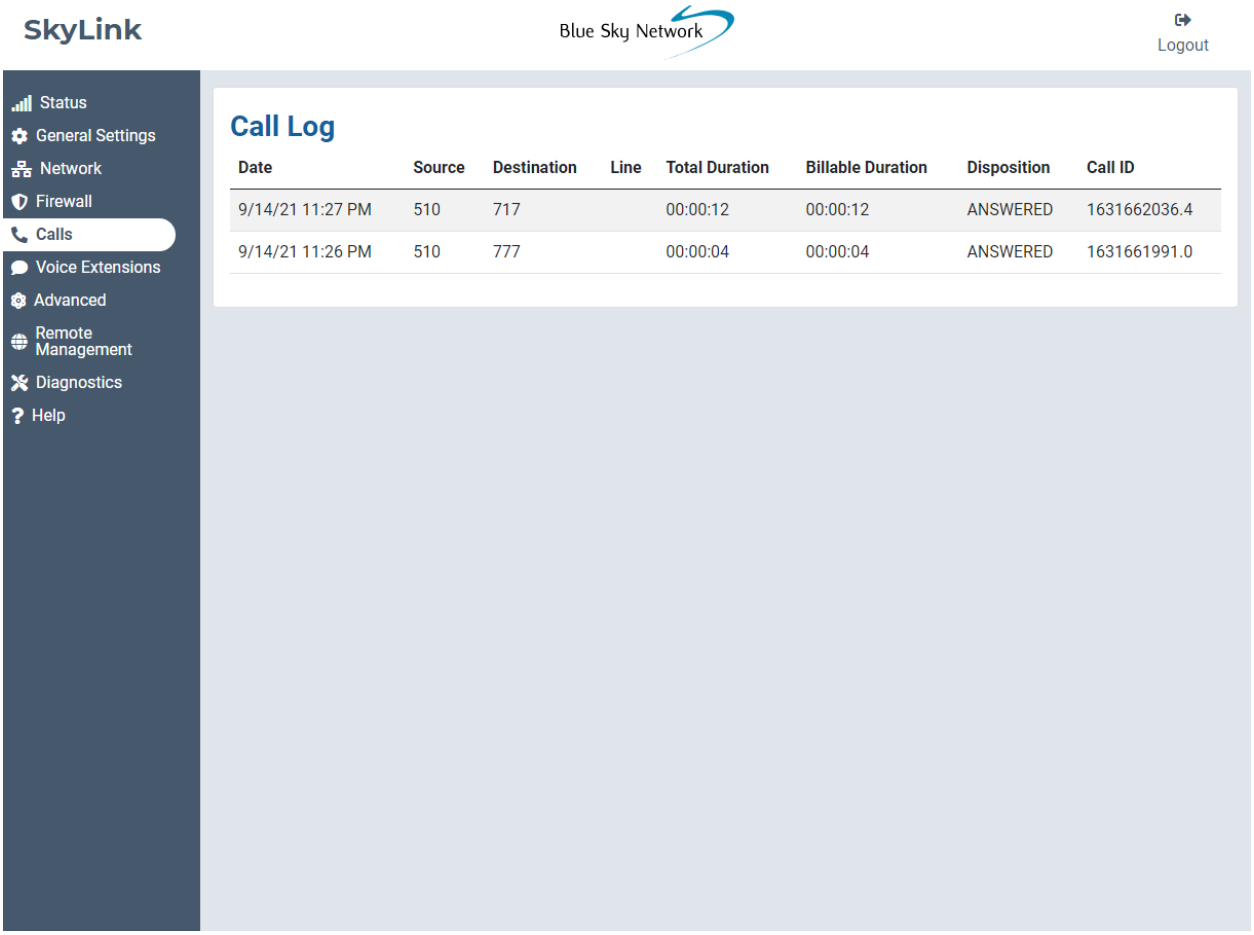
Calls

A list of incoming and outgoing calls by line and extension number can be found on this screen. It also includes the day and time that the call was placed, its total vs. expected billable duration, and whether or not it was answered. **NOTE**: Internal calls will not generate an Iridium bill.

Each call is assigned a unique ID number that can be provided to the Blue Sky Network support team for troubleshooting purposes in the event that there is a call issue.



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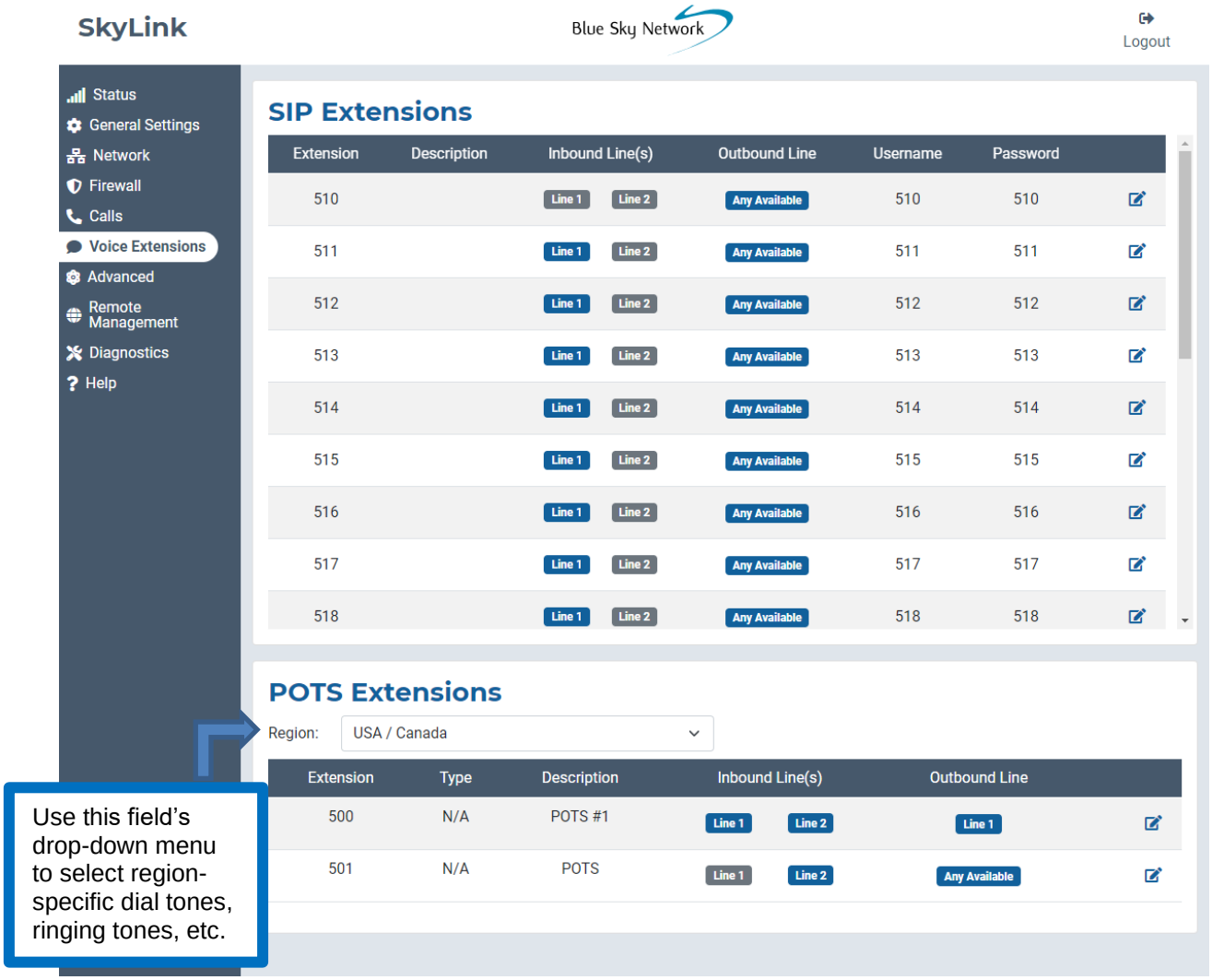
Voice Extensions

Information and configuration settings for mobile and landline phones can be found here. The Inbound Line(s) column shows the order in which line numbers ring when a call comes in. By default, the first extension allows calls to both Line 1 and Line 2, the next 10 extensions allow calls to Line 1 only, and the following 10 to Line 2 only. The Outbound Line column is set to Any Available by default.

The username and password are the respective extension number; these can be changed on this screen.



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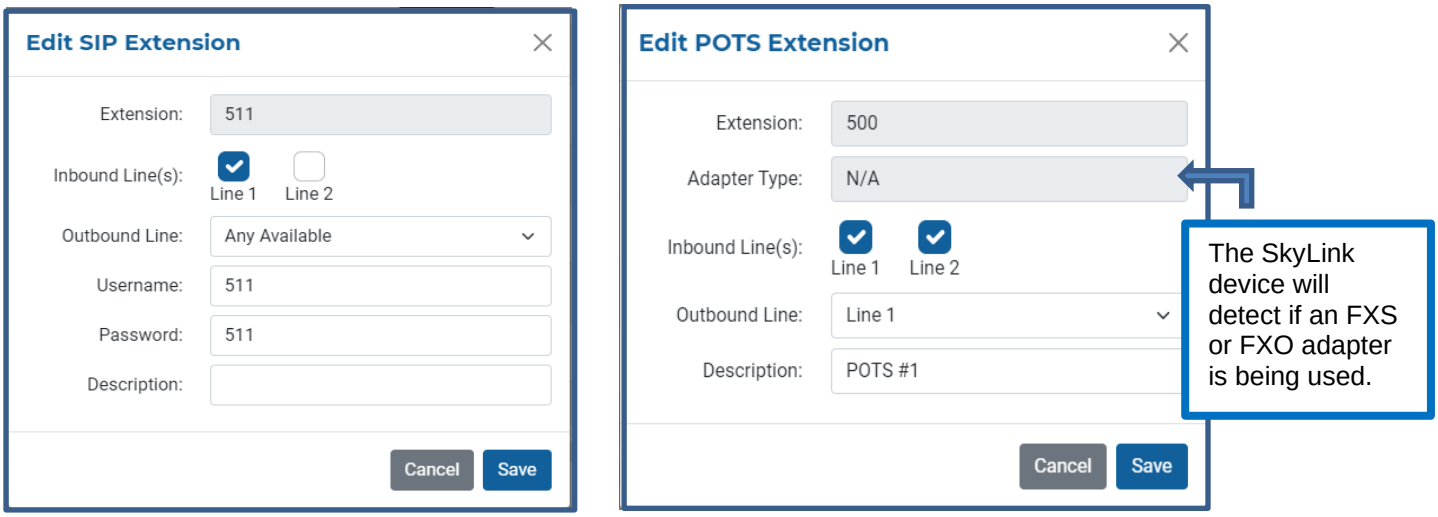
EDITING A SIP OR POTS EXTENSION

Click the icon next to the SIP or POTS extension that you would like to edit. In the pop-up window, complete the fields and add a description if desired, then press 'Save.'



Under the Inbound Line(s) field, tick each box to allow calls to both Line 1 and Line 2. Deselect both lines to block calls from ringing to an extension. **NOTE**: If you are not receiving calls to your extension, ensure one or both lines are selected here.

Use the drop-down menu in the Outbound Line field to choose whether Line 1, Line 2, or Any Available line can be used when making a phone call from this extension. A scenario for only selecting one line would be a ship captain who has Line 1 reserved, and the crew uses Line 2.

NOTE: Selecting only Line 1 or Line 2 in the Inbound Line(s) field along with the Any Available option in the Outbound Line field may cause issues when returning calls. For example, if only Inbound Line 1 is selected and you dial on Any Available Outbound Line, you may dial out on Line 2; this would leave someone unable to return your call.

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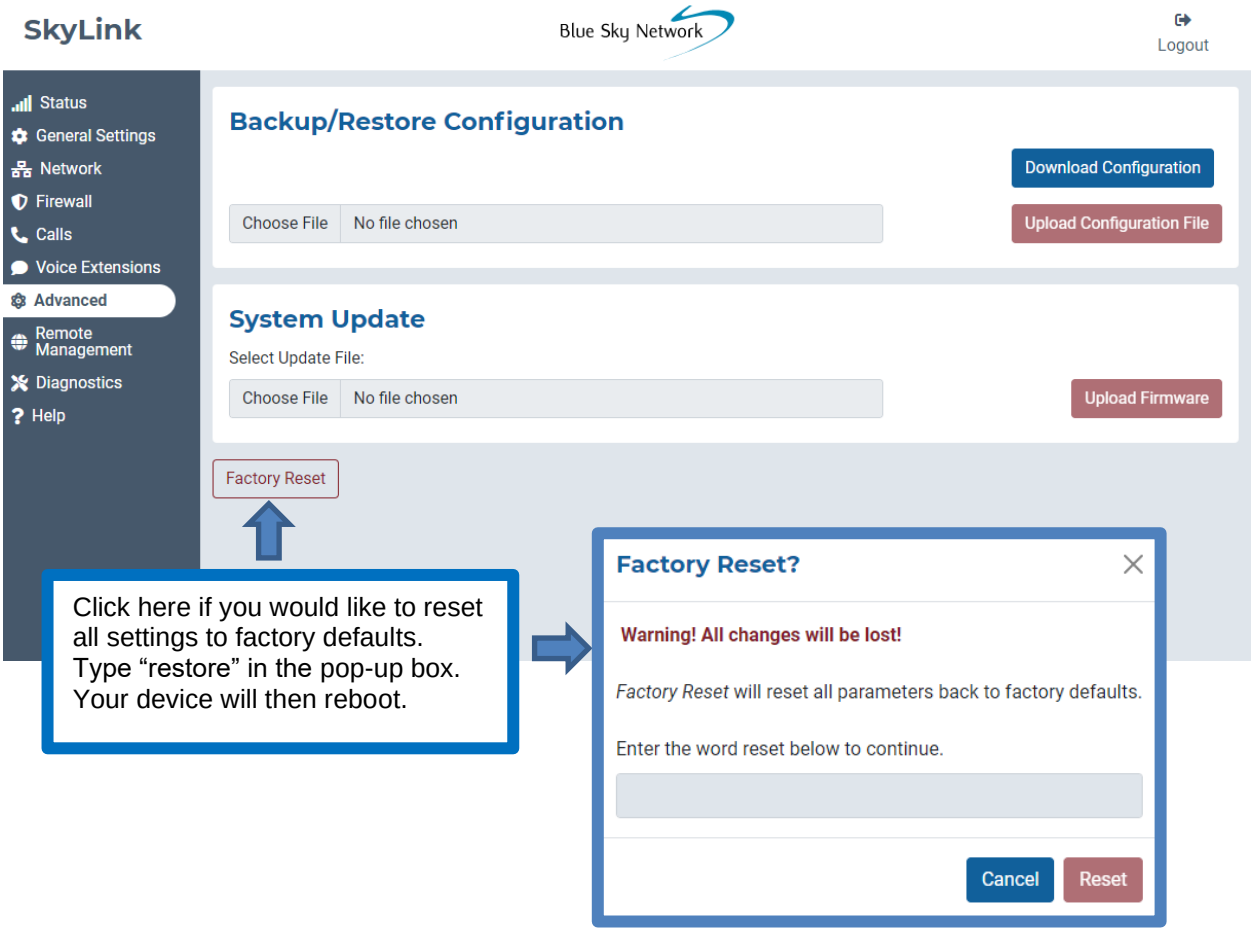
Advanced

Use this screen to backup or restore a system configuration, or when the system is ready to be updated. SkyLink firmware includes the 9770 Certus modem firmware; appropriate versions will be upgraded or downgraded as needed.

NOTE: The Status screen will display the SkyLink's current firmware version, and the Diagnostics screen will display the current 9770 Certus modem firmware version.



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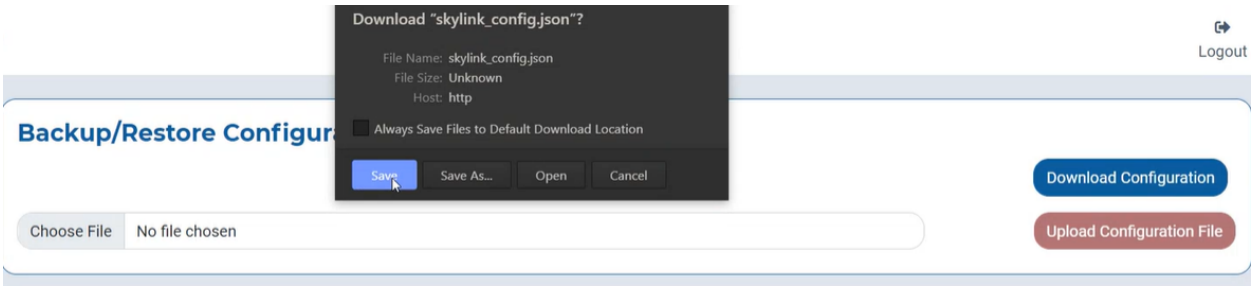
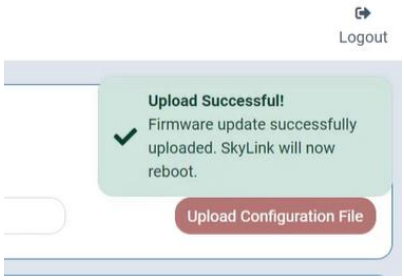
BACKUP/RESTORE CONFIGURATION

To restore a system configuration, click ‘Choose File,’ then select the appropriate .tpz file from your computer/personal device. Click ‘Save’ then ‘Upload Configuration File.’ Wait for your SkyLink device to reboot. To back up a configuration, press ‘Download Configuration’ and wait for the device to reboot.



SYSTEM UPDATE

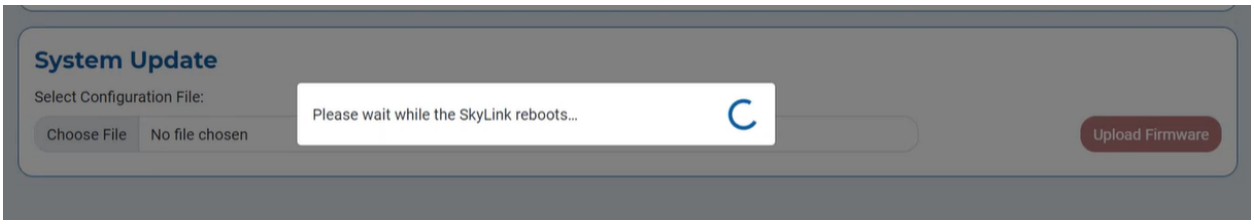
When the system is ready to be updated, click ‘Choose File,’ select the appropriate .tpz file, then press ‘Upload Firmware.’ Once it has updated, the below message will appear in the top of the screen:



NOTE: BSN will not downgrade the Certus 9770 modem firmware unless specifically required by Iridium.

You will then be prompted to wait while the SkyLink device reboots. This may take several minutes.

As it updates, the power LED indicator located on the top panel of the device will blink blue. A red blink indicates an Iridium firmware upgrade or downgrade. ***The SkyLink device should not be powered off while the power LED indicator is blinking blue or red.***



Once the web browser refreshes and the power LED indicator shows a steady blue light, the update has finished, and your device will be ready to use.

NOTE: If updating fleets of devices, you will want to use the SkyLink Online Portal.

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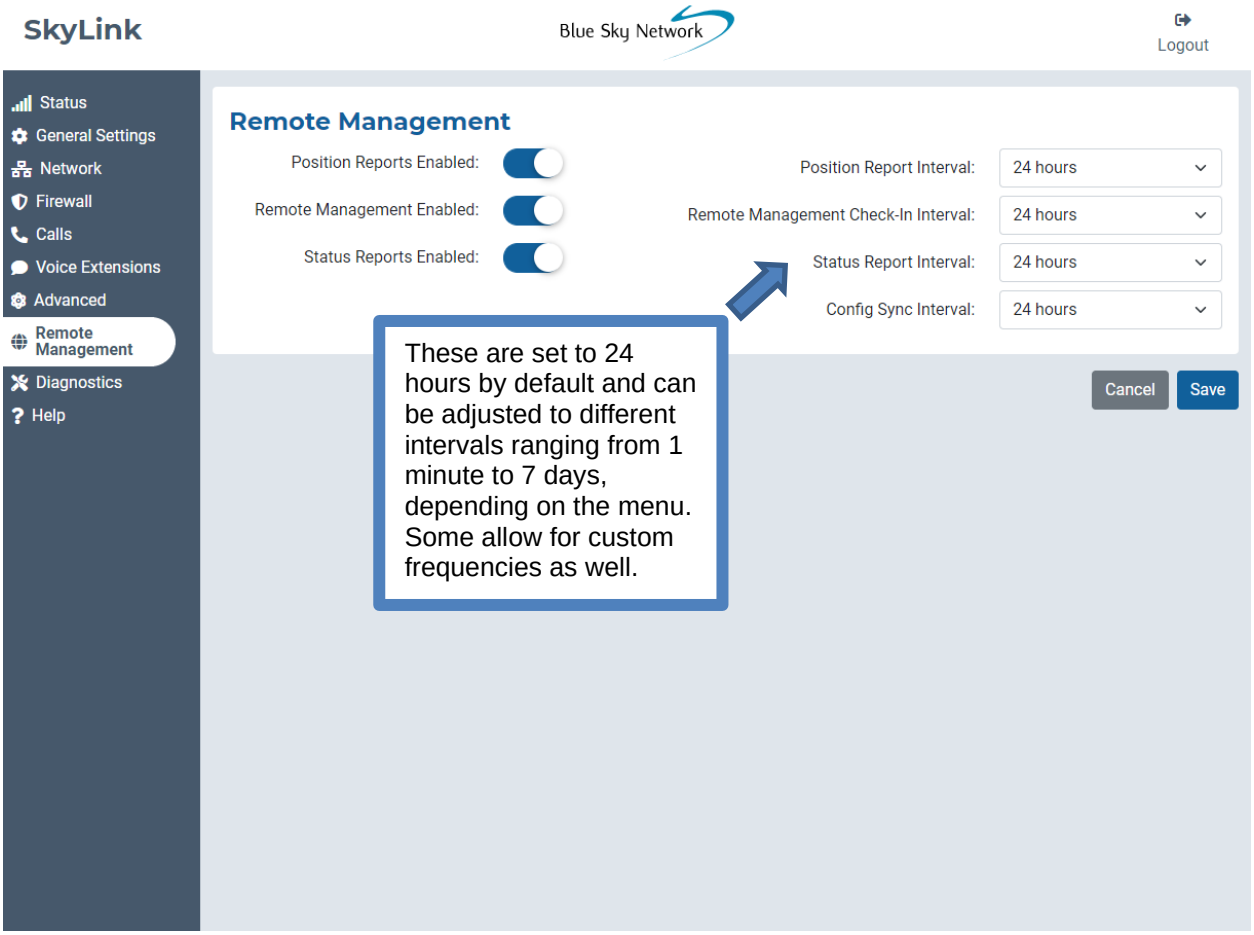
Remote Management

This screen provides configuration options for IoT management via the SkyLink Online Portal, including enabling and disabling position reports, remote device management, and status reports. Use the drop-down menus to set reporting, syncing, and check-in frequencies.



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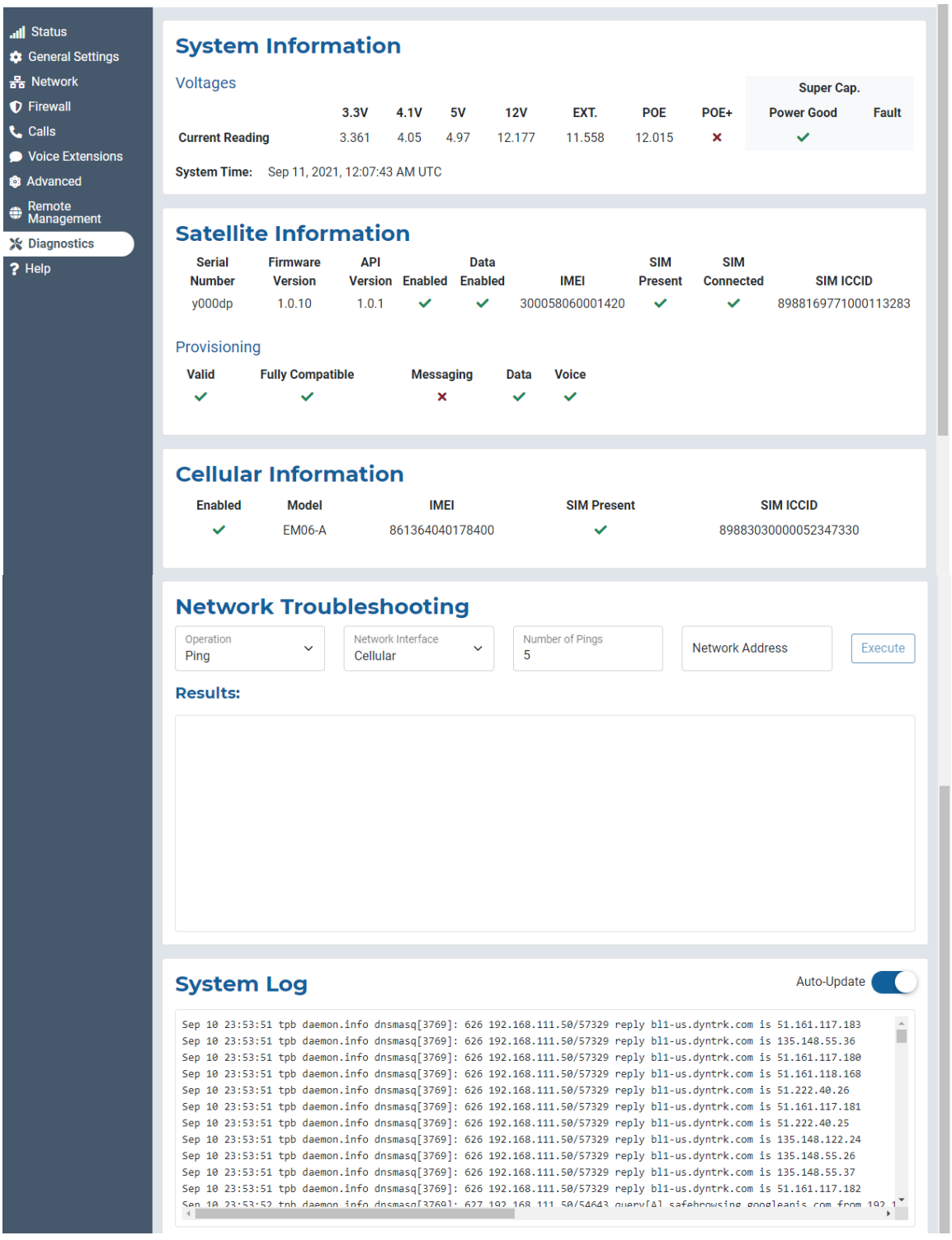
Diagnostics

Information to help you diagnose and resolve satellite and cellular issues can be found here.



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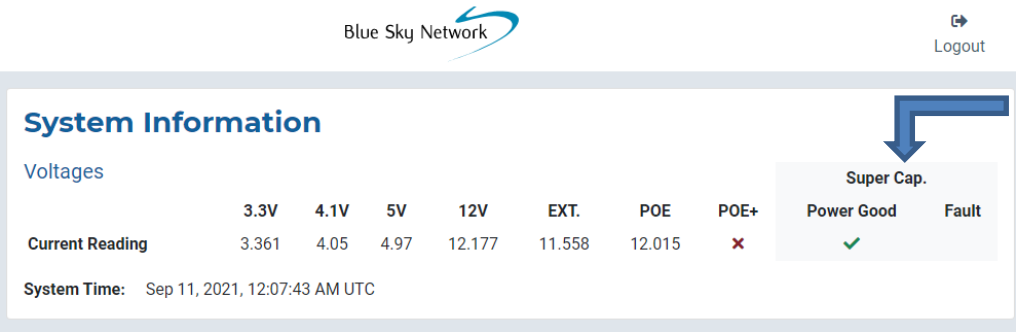
SYSTEM INFORMATION

This section provides diagnostics that you may be asked for in the event that you report a technical issue to the Blue Sky Network support team.

Data points may be shown for POE only, EXT (external 12V power) only, or both.



Data points about the supercapacitor (SC) can be found here.

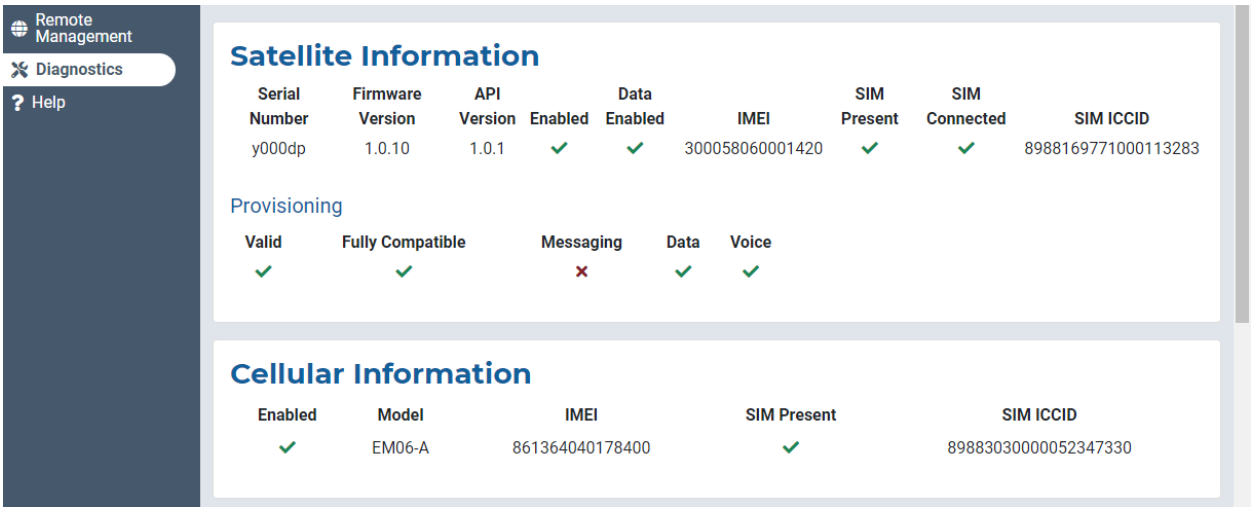
A check mark under Power Good means good power is detected to charge the SC.

A red 'x' under Fault indicates a power fault in the unit.

SATELLITE & CELLULAR INFORMATION

Use these sections to verify that your satellite and cellular capabilities are enabled, indicated by check marks. You can also view identifying information such as satellite/cellular IMEI and SIM ICCID numbers.

The Satellite Information section shows the modem's serial number, firmware & API versions, whether data is enabled, and if the SIM is present and connected. Provisioning details are available here as well.



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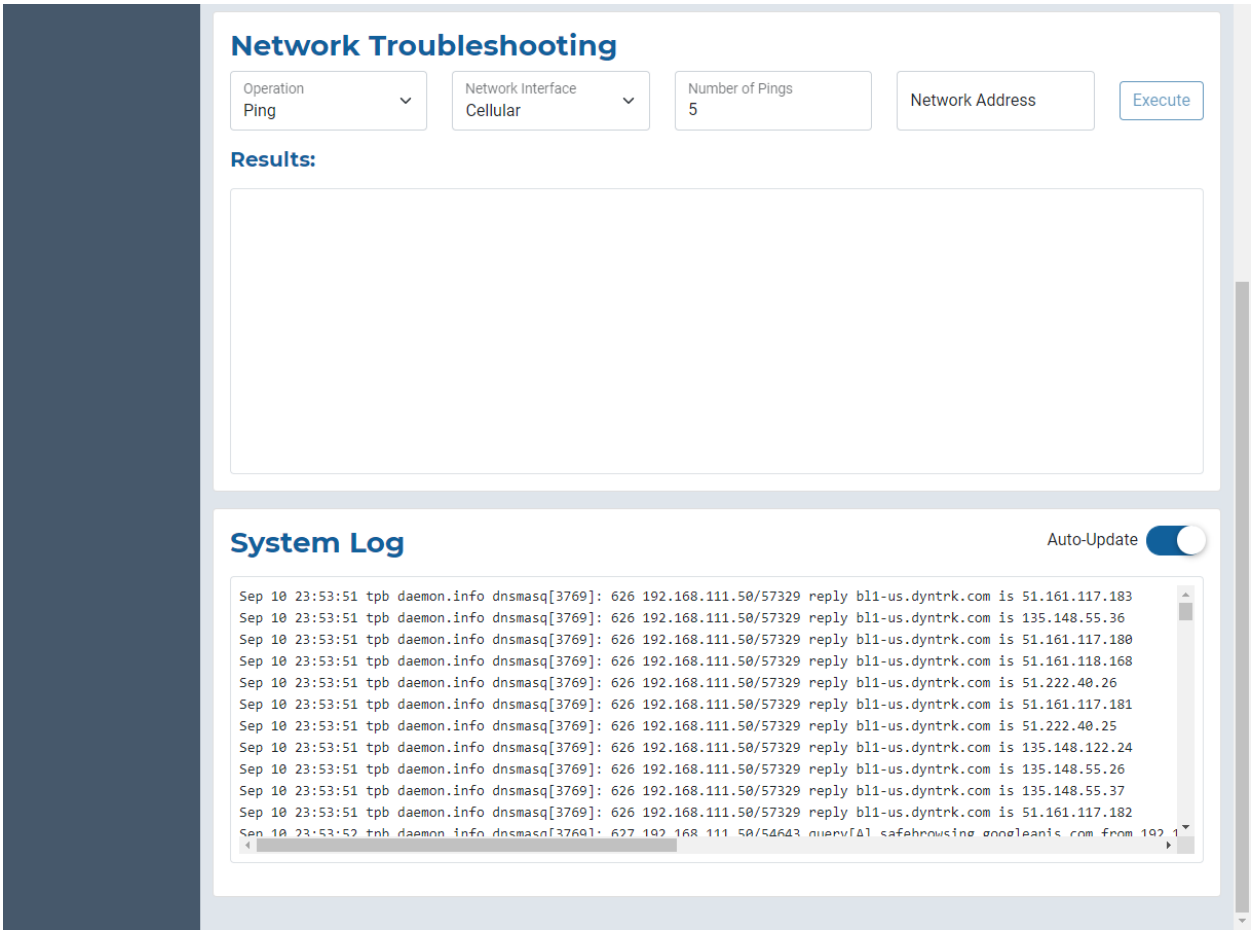
NETWORK TROUBLESHOOTING

Here you can use the Operation drop-down menu to perform pings and trace routing. Press the ‘Execute’ button to the right after selecting your preferred configurations.

The information displayed in the System Log can be used by the BSN support team for diagnostic purposes. Use the toggle button to enable or disable automatic updates.



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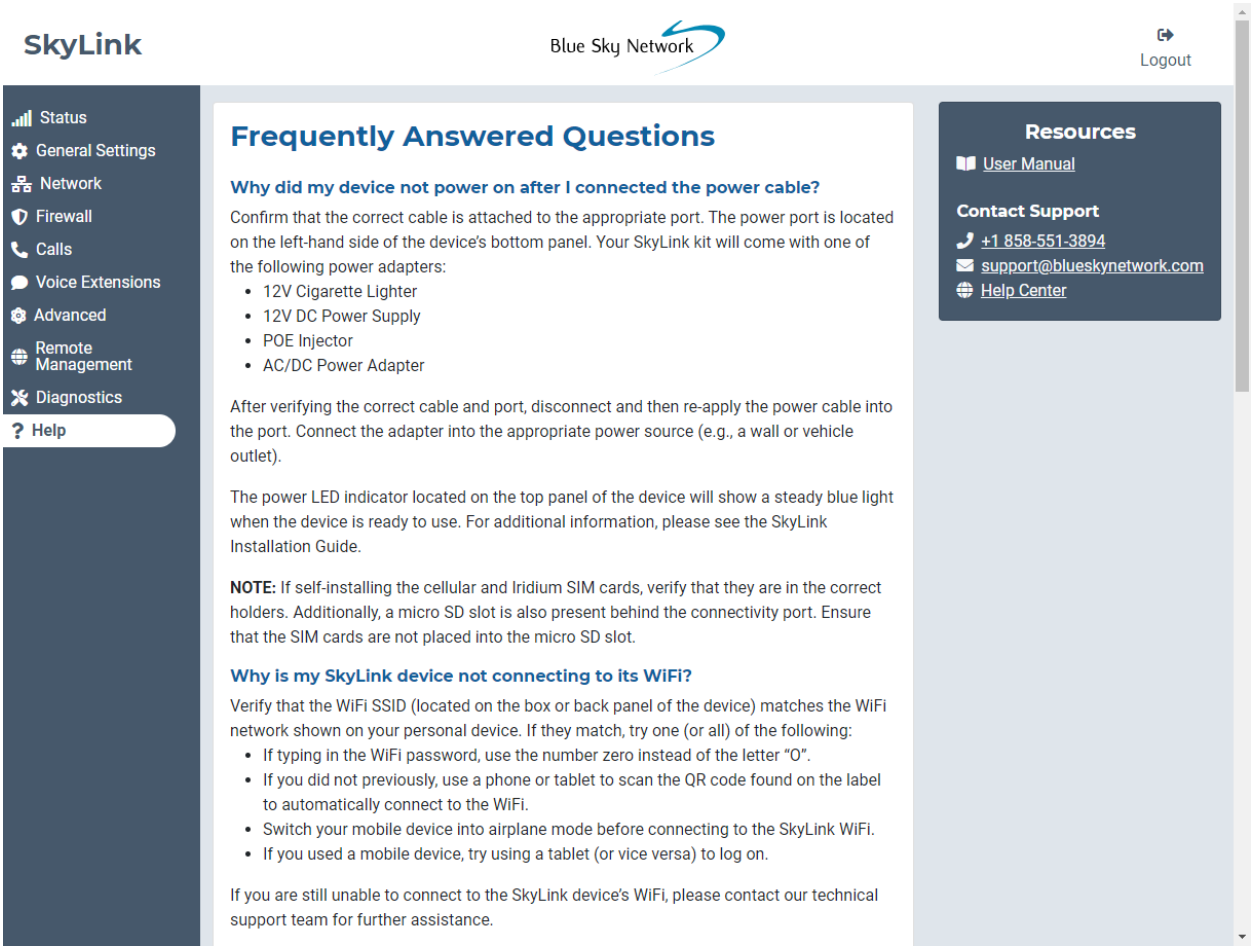
Help

This screen contains multiple resources, including the SkyLink User Guide and contact information for BSN Support, to help you troubleshoot hardware and firmware issues. A full list of FAQs can also be found at the end of this User Guide.



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SKYLINK CAPABILITIES

Now that you are familiar with the SkyLink Web Interface, you are ready to use your device! The following describes the most common device capabilities.

Making Phone Calls

The SkyLink device supports 2 phone lines and a network connection that accepts SIP, providing users with multiple voice options. Each option offers 2 Iridium inbound and outbound lines. POTS customers also have FXS and FXO options to choose from.

Before making a phone call, ensure the following is completed:

- You have properly installed your activated Iridium SIM card.
- You have connected one of the following Iridium-approved antennas to the SkyLink device:
    - MARUWA (MHL-1621C)
    - High-Profile Maxtena (M1621HCT-HP)
    - Low-Profile Maxtena (M1621HCT-LP-SM; M1621HCT-LP-MM)
    - Sensor Systems (S67-1575-414)
    - SCAN (65020-000)

  NOTE: Please see the SkyLink Installation Guide for detailed information on installing the SIM card and antennas.
- You have enabled satellite capability by navigating to the General Settings screen on the SkyLink Web Interface and sliding the left-hand toggle button.

You are now able to make inbound/outbound calls via your landline phone or personal device, including third-party apps on computers, smart phones, or tablets. Use the Voice Extensions screen on the SkyLink Web Interface to configure line extensions and the Calls screen to view call status information.

OPTIMIZING SIP PHONE APPS

Below are a few setup pointers for SIP phone apps (e.g., GS Wave, Linphone).

iPhone/Android settings:

- Airplane mode
- Smartphone Settings > Wave Lite App > Enable ‘Local Network’ access
- Smartphone Settings > Wave Lite App > Disable ‘Cellular Data’

GS Wave settings:

- ‘WiFi only’ mode enabled
- Account Name: 510 (510-516 available default)
- SIP Server: 192.168.111.1 (unless SkyLink Web Interface IP has been changed)
- SIP User ID: 510
- Authentication ID: 510
- Password: 510

Additional settings for other SIP phone apps (Linphone, etc.):

- Codecs (if setting is available): Enable – A-LAW, 722. Disable – U-LAW

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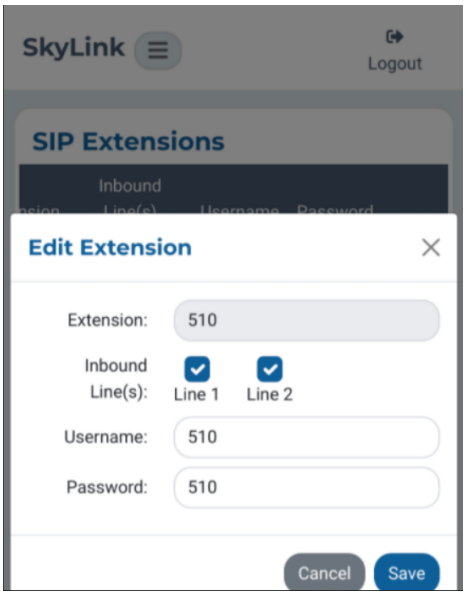
NOTE: If using a physical SIP phone (not a SIP phone app), please see your SIP phone manufacturer's documentation for information on configuring the phone with your SkyLink device.

If you are not receiving incoming call notifications on SIP extensions, it may be that the SIP extension you are using is not configured to receive incoming calls from the Iridium line you are calling.



To configure both lines:

1) Navigate to the Voice Extensions screen
2) Click the icon next to the SIP or POTS extension that you would like to edit.
3) Ensure that both boxes in the Inbound Line(s) field are ticked, then click 'Save.'

Connecting to the Internet

To connect to the internet, first ensure that:

- You have properly installed your activated Iridium and cellular SIM cards.
- You have connected the LTE antenna or an Iridium-approved antenna to the SkyLink device (full list included in above section on Making Phone Calls).
- You are connected to the SkyLink device WiFi or are using an ethernet cable.
- Satellite or cellular capabilities have been enabled via the toggle buttons on the General Settings screen of the SkyLink Web Interface.

You are now able to use your personal device to browse the internet and use mobile applications.

NOTE: Satellite internet connection supports messaging apps, mobile-optimized web surfing, and IoT data transfers. It is not intended for general web browsing or high bandwidth applications and may cause slow connection speed if used for these purposes. Please visit Iridium.com/mobile for a list of mobile-optimized sites.

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Using the Serial Port

The SkyLink device supports AT Command Set emulation via the serial port, enabling legacy sensor connection to the cloud. Default port settings are 230400 8N1 (Baud: 230400; Data bits: 8; Parity: none; Stop bits: 1).

Basic command functionality is available to query signal strength, connection strength, and model number.

Use command:	To:
ATD	Dial a number
+++	End your session
BREAK	Issue a new command
ATH	End a current call
AT#FACTORYRESET	Perform a factory reset of the entire device
ATZ	Reset the modem

NOTE: Any command that we do not support will return ERROR but can be implemented upon request.

You can dial an IP address by using one of the following formats:

Format:	Connects to:
ATD1.2.3.4:777	1.2.3.4 on port 777
ATD0100000000005068	10.0.0.5 on port 68
ATD192168111003#777	192.168.111.003 on port 777

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SKYLINK SPECIFICATIONS & INSTALLATION

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

Wi-Fi

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

Regulatory Standards and Compliance

- US (FCC)
- EU (CE MARK)
- Canada (IC)
- IP65 rating

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Software Specifications

CONFIGURATION

- Local configuration of SkyLink devices using Wi-Fi or Ethernet
- Remote configuration of SkyLink devices, features, and settings
- Bulk device configuration
- DHCP server, client, or static IP address
- Wi-Fi 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
- Ability to apply different profiles per interface (satellite vs. cellular0
- Advanced Rules that allow customers

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
- Customizable schedule

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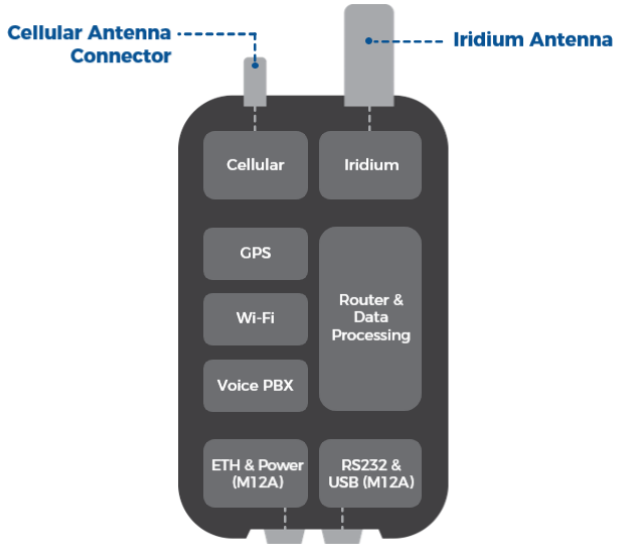
Diagram



Installation

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

Troubleshooting

The power LED indicator located on the top panel of the unit will cycle 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 becomes stuck on red, remove the power cable from the power port and wait approximately 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 us for technical support.

Cable Diagrams

Please see the SkyLink Installation Guide for a comprehensive list of cable diagrams.

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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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FREQUENTLY ASKED QUESTIONS

We have compiled a list of frequently asked questions and answers below. If you are still unable to resolve your issue, please contact Blue Sky Network Technical Support and we will be happy to help!

Connectivity

1. **Why is my SkyLink device not connecting to its WiFi?**
   - Verify that the WiFi SSID (located on the box or back panel of the device) matches the WiFi network shown on your personal device. If they match, try one (or all) of the following:
     - If typing in the WiFi password, use the number zero instead of the letter “O”.
     - If you did not previously, use a phone or tablet to scan the QR code found on the label to automatically connect to the WiFi.
     - Switch your mobile device into airplane mode before connecting to the SkyLink WiFi.
     - If you used a mobile device, try using a tablet (or vice versa) to log on.

   If you are still unable to connect to the SkyLink device’s WiFi, please contact our support team for further assistance.

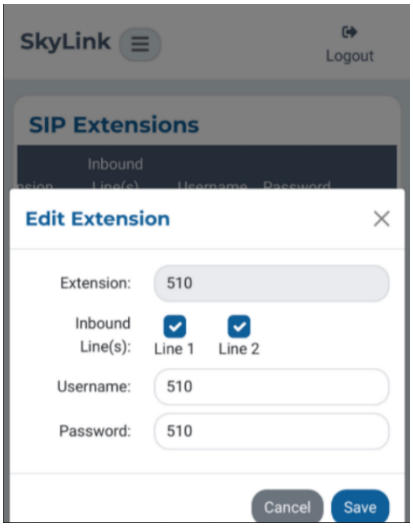
2. **What are the cellular modem options? Can they be exchanged?**
   - Currently, the cellular modem options are:
     - Quectel EM06-A (Americas/Global)
     - Quectel EM06-B (Europe)
     - Quectel EM12G (Brazil)

   Yes, Blue Sky Network can support any Key B M.2 cellular card with advanced notice.

3. **What frequencies does the WiFi use for the SkyLink Data Gateway and Communications Companion?**
   - The WiFi uses 2.4Ghz and 5Ghz, and the channels depend on the regulatory domain selected. More information can be found in the User Guide under the WiFi & Cellular section. If using a more capable Companion WiFi option, you will want to disable the Gateway WiFi.

4. **I am not receiving incoming call notifications on SIP extensions.**
   - The SkyLink device has 2 incoming Iridium phone lines. It is possible that you are not receiving call notifications because the SIP extension you are using is not configured to receive incoming calls from the Iridium line you are calling.

     In the SkyLink Web Interface:
     1) Navigate to the Voice Extensions screen
     2) Click ‘Edit’ on your extension
     3) Ensure that both boxes in the Inbound Line(s) fields are ticked, then click ‘Save.’



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Antennas / Cables / Power Sources

5. Why did my device not power on after I connected the power cable?

- Confirm that the correct cable is attached to the power port located on the left-hand side of the device's bottom panel. Your SkyLink kit comes with one of the following power adapters:
  - 12V Cigarette Lighter
  - 12V DC Power Supply
  - POE Injector
  - AC/DC Power Adapter

After verifying the correct cable and port, disconnect and then re-apply the power cable into the port. Connect the adapter into the appropriate power source (e.g., a wall or vehicle outlet).

The power LED indicator located on the top panel of the device will show a steady blue light when the device is ready to use. For additional information, please see the SkyLink Installation Guide.

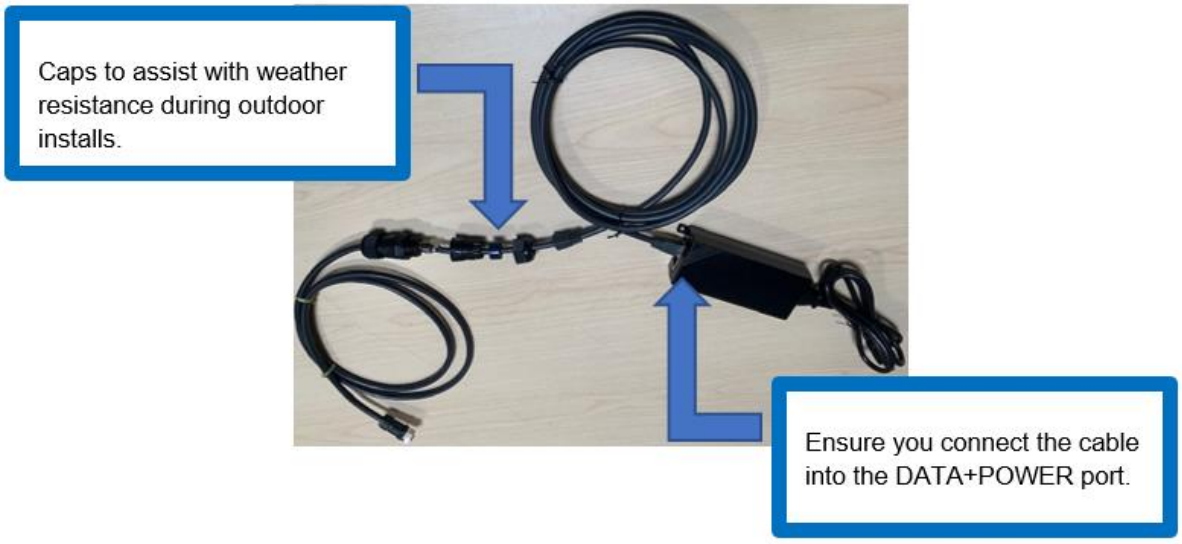
NOTE: If self-installing cellular and Iridium SIM cards, verify that they are in the correct holders. Additionally, ensure they are not placed in the micro SD slot also present in the connectivity port.

6. My kit came with a Power Over Ethernet (POE) power source. What is it and how do I use it?

- Power over Ethernet (POE) is a technology that passes electric power to your device over an Ethernet cable, powering it without the need for a traditional AC power supply.

To use this technology, you will need the POE Injector (which adds power to a non-powered ethernet connection) included in your kit or a POE enabled switch (which is a network switch that provides power to connected devices).

We support both common standards: regular POE (sometimes referred to as 802.3at) and POE+ (sometimes referred to as 802.3af).



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7. Can I use an alternative cellular antenna?

- Yes. The SkyLink device has 3 antennas:
    - 1 internal GPS
    - 1 internal LTE diversity
    - 1 external LTE main

  The LTE main antenna can be replaced with any proper LTE antenna that you wish to use.

8. Can I use the existing Iridium antenna installed in my building with my Data Gateway device?

- No, Certus antennas for SkyLink are required. The following are acceptable to use:
    - MARUWA (MHL-1621C)
    - High-Profile Maxtena (M1621HCT-HP)
    - Low-Profile Maxtena (M1621HCT-LP-SM; M1621HCT-LP-MM)
    - Sensor Systems (S67-1575-414)
    - SCAN (65020-000)

9. What is included in an RS232 cable kit?

- The SkyLink RS232 cable kit comes with a DB9F connector and conforms to the RS232 standard pinout for a DB9. **NOTE**: RS232 cables for SkyLink are proprietary and available only from Blue Sky Network. Please contact sales@blueskynetwork.com or your reseller to purchase.

10. I received a SkyLink DC Pigtail Harness. What are its specs?

- This is the cable you receive if you request the currently labeled 'SL100-IS, SkyLink 10' Power Interface Cable with QuickPosition (QPos).' The specs are as follows:

OPERATING PARAMETERS

Electrical

- External power:
    - 10-34 VDC (12V nominal power)
    - POE
- Power consumption

Function	Color
+Vin	Brown
GND	Green
SOS	White

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Device Management

11. How do I prioritize data routing to use GSM or SAT first?

- Navigate to the General Settings screen on the SkyLink Web Interface. Choose your desired configuration from the Data Routing drop-down menu and save your selection. Settings are applied immediately.

  NOTE: Iridium QoS (also called Iridium secondary data flows) are not supported on Certus100, therefore, BSN cannot offer per-stream priorities or VLANs over the Iridium link.

12. Where can I find the current SkyLink and satellite firmware versions?

- The Status screen on the SkyLink Web Interface has the device's current hardware and software versions. 'SYN267 REV F' refers to the chipsets/hardware revision and '2.02-210627-0009' refers to the firmware revision/date/time. The Diagnostics screen contains the Certus 9770 modem's current version.

13. How can I manage a fleet of SkyLink devices?

- The SkyLink Online Portal enables the configuration and operation of fleets of devices via cloud management. Device management can also be performed locally for that particular device only.

14. How do I set up my apps to low bandwidth?

- Navigate to the Settings page in the app and select the option to use less data. Please note that not all apps have this capability. On iPhone, 'Low Data Mode' is available on the WiFi Config screen for each WiFi network.

15. How can I optimize the use of my SIP phone apps (e.g., GS Wave, Linphone)?

- Below are a few setup pointers for SIP phone apps:

  iPhone/Android settings:
  - Airplane mode
  - Smartphone Settings > Wave Lite App > Enable 'Local Network' access
  - Smartphone Settings > Wave Lite App > Disable 'Cellular Data'

  GS Wave settings:
  - 'WiFi only' mode enabled
  - Account Name: 510 (510-516 available default)
  - SIP Server: 192.168.111.1 (unless SkyLink Web Interface IP has been changed)
  - SIP User ID: 510
  - Authentication ID: 510
  - Password: 510

  Additional settings for other SIP phone apps (Linphone, etc.):
  - Codecs (if setting is available): Enable – A-LAW, 722. Disable – U-LAW

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Other

16. What is the safety distance between the Data Gateway and human interaction?

- To avoid exposure to antenna radiation, personnel should maintain a safe distance of 30 cm. (11.8 in.) minimum from the unit while it is in operation.

17. Will my device overheat if left outside for too long?

- The SkyLink device will operate normally in temperatures between -40°C - +70°C. Prolonged exposure to temperatures outside of this range may cause the device to lose functionality.

18. What is the battery performance of the SkyLink Backup Battery?

- The long life SkyLink Backup Battery will provide up to 48 hours of continuous power per charge.

19. Does the app-based PTT in the SkyLink Communications Companion use Iridium voice or data?

- The Communications Companion will use Iridium data.

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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!

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