SKYLINK



Frequently Asked Questions

Blue Sky Network

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ABOUT SKYLINK

Introduction to SkyLink

SkyLink by Blue Sky Network is the inaugural Iridium Certus 100 mid-band solution for land mobile, aviation, IoT, and maritime markets. 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

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 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 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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FREQUENTLY ASKED QUESTIONS

We have compiled answers to FAQs listed under their respective categories. If you are still unable to resolve your issue, please contact the Blue Sky Network support team and we will be happy to help!

Connectivity

1. *Why can I not connect to the SkyLink WiFi?*

Verify that the WiFi SSID (located on the box and 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 the Blue Sky Network support team for further assistance.

2. *What are the cellular modem options? Can they be exchanged?*

Yes, Blue Sky Network can support any Key B M.2 cellular card with advanced notice. Currently, the cellular modem options are:

- Quectel EM06-A (North America / Mexico)
- Quectel EM06-E (Europe / Middle East / Africa / Asia Pacific / Brazil)
- Quectel EM12G (Brazil)

3. *Which WiFi frequencies are used for the SkyLink Data Gateway?*

The WiFi uses 2.4Ghz and 5Ghz; the channels depend on the regulatory domain selected (more information can be found in the User Guide under General Settings > WiFi & Cellular). If using a more capable Companion WiFi option, you will want to disable the Gateway WiFi.

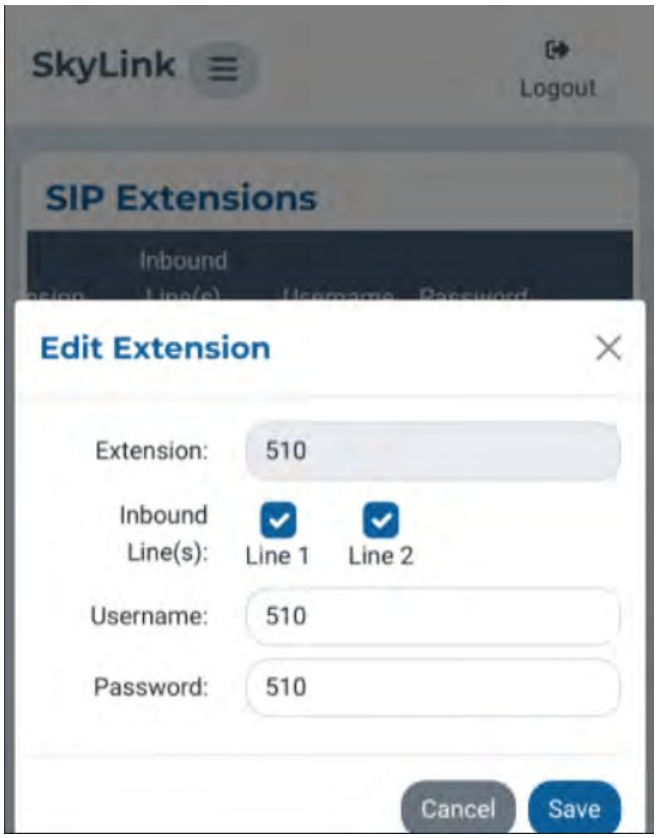
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4. I am not receiving incoming call notifications on SIP extensions.

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 Device Interface:

1) Navigate to the Voice Extensions screen
2) Click 'Edit' on your extension
3) Ensure that both boxes in the Inbound Line(s) field 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 on the left-hand side of the device's bottom panel. Your SkyLink kit will come with one of the following power adapters:

- 12V Cigarette Lighter Adapter
- SkyLink DC Pigtail Harness
- POE Injector (self-assembly kit)
- AC/DC Power Supply (self-assembly kit)

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.

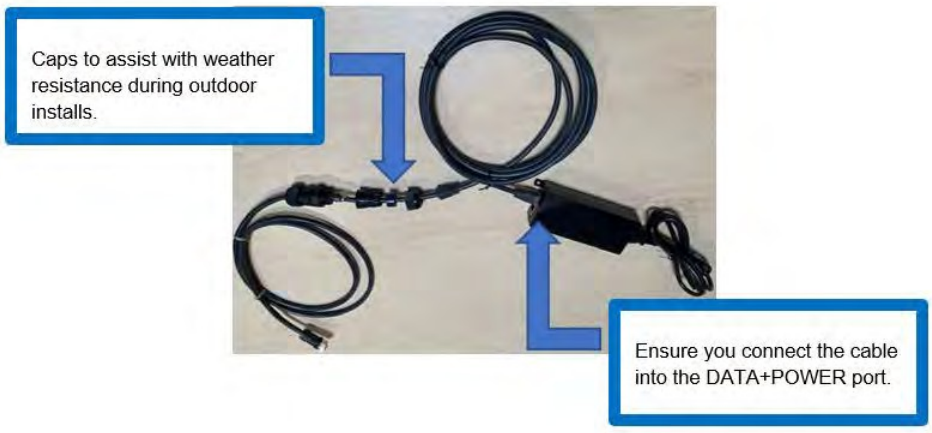
NOTE: If self-installing cellular and Iridium SIM cards, verify that they are in the correct holders. Additionally, ensure they are not placed in the micro SD slot also present in the connectivity port.

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)
- 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
- Wiring

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 Connection Manager screen on the SkyLink Device 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 Certus 100, 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 Device Interface has the unit'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 Cloud Services portal allows you to configure, monitor, and manage fleets of devices. Use the SkyLink Device Interface for local management of a particular device.

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

Navigate to each app's Settings page 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.

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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 Device 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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TOC BOX & Battery Pack

16. What is the battery performance of the SkyLink Battery Pack?

The SkyLink Battery Pack has a run-time of up to 48 hours based on a typical 80/20 (standby/transmitting) duty cycle (specifications subject to change).

17. What is the battery performance of the SkyLink TOC BOX?

The 2 batteries attached to the system provide up to 28 hours of continuous operation in normal mode and up to 10 hours in peak mode (specifications subject to change).

18. Is the SkyLink Battery Pack safe/approved for aviation carry-on luggage?

Yes, the Battery Pack meets current TSA requirements for carry-on luggage.

Other

19. 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.

20. Why is there a billing discrepancy between the data usage seen on my SkyLink device versus my invoice?

The SkyLink device's billing feature is only an approximation, similar to what you see on your cellphone versus a bill from your service provider.

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

The SkyLink device operates normally in temperatures between -40°C - +70°C. Prolonged exposure to temperatures outside of this range may cause the device to lose functionality. Please see the SkyLink User Guide for a full list of device specifications.

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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 support@blueskynetwork.com.

Thank you for choosing Blue Sky Network!

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