

HE7200A-BB2327 TROUBLESHOOTING

PREPARE

These procedures are intended for diagnosing a HE7200A-BB2327 device which is not reporting to the SkyRouter servers. Once the troubleshooting procedures below have been performed please do not hesitate to forward your test results to support@blueskynetwork.com for review.

Before beginning the tests please ensure that the following notes are observed:

- You will need access to a SkyRouter account with permissions to access the problematic device. Ensure that the HE7200 device has been activated by checking a recent invoice or the Manage Devices page in SkyRouter, if the device is not activated submit an activation request at our support site: https://support.skyrouter.com.
- 2. Ensure that the Antenna cables are securely fastened by hand to the appropriate connectors (Iridium to Iridium, GPS to GPS) at both the HE7200A-BB2327 and Antenna itself.
- 3. Ensure that the Antenna is in a location where it will have a completely unrestricted view of the sky; the device should maintain a clear line of sight to the horizon and directly above throughout the tests.
- 4. Verify the power source is between 10-32V DC.

TEST & TROUBLESHOOT

POWER-ON PERFORMANCE PROCEDURE

Ensure that the HE7200A-BB2327 is powered OFF before performing the following procedures.

- 1. Supply power to the HE7200A-BB2327 device. When power is first applied all LED's will be on and solid for 2 seconds, the GPS and Iridium LED's will then turn off. At this point the device has passed the boot stage.
- 2. After a few seconds the GPS and Iridium LEDs begin to flash rapidly indicating that the device is searching for signals.
- 3. When the device has Iridium and GPS signals the LEDs will remain ON SOLID, this may take up to 30 minutes in some circumstances^{**}.
- 4. Check SkyRouter for position reports from the device.

** Please note that in circumstances where the HE7200A-BB2327 has been powered off for over 180 days or has been shipped while powered off; it may take up to 30 minutes for the device to acquire a GPS fix.

TROUBLESHOOTING

Unit fails on step 1 or step 2:

Check the power source, ensure that 10-32VDC is being delivered to the device on pin 1 and is grounded on pin 2 of the DB15 connector. If power is being delivered to the device but it still fails before step 3; you may be able to resolve the issue by reloading the firmware, a firmware upgrade kit is available for download at <u>https://support.skyrouter.com</u>. After reloading the firmware; if the device fails again on step 1 or step 2 you may need to return it to Blue Sky Network for evaluation at our facilities, please contact Blue Sky Network support at <u>support@blueskynetwork.com</u>.



HE7200A-BB2327 Troubleshooting

TROUBLESHOOTING...CONTINUED

Unit fails on step 3:

Check the connections to the antenna and HE7200A-BB2327, ensure that the connections are securely fastened by hand and are not cross-threaded or corroded. Ensure that the antenna cables are connected to the correct ports (Iridium to Iridium, GPS to GPS). Ensure that the Antenna has an unrestricted view of the sky and is located away from any possible sources of interference. Check cable continuity and verify that the maximum bend radius has not been exceeded (this can cause permanent damage). If the device fails to acquire signals after 30 minutes you may need to return it to Blue Sky Network for evaluation at our facilities, please contact Blue Sky Network support at support@blueskynetwork.com.

Unit fails on step 4:

Verify that the service plan is active. If the device fails on step 4 (you do not see any reports appear at SkyRouter after a period of 30 minutes); or you have any other questions or concerns; please contact Blue Sky Network support at support@blueskynetwork.com.

Unit passes all steps:

If the device passes all tests and you are able to see position reports at SkyRouter you should assume that the device is functioning as expected.

LED BEHAVIOR

The Image (right) depicts the LED display on the front panel of the HE7200A-BB2327, see the descriptions below for expected LED blink patterns:



- **POWER:** This LED should remain ON SOLID as long as power is being properly applied to the device.
- **IRIDIUM:** This LED will blink repeatedly while the device is searching for signal. The LED will be ON SOLID when the device has a satellite fix.
- **GPS:** This LED will blink repeatedly while the device is searching for signal. The LED will be ON SOLID when the device has a satellite fix.

SUPPORT RESOURCES

Support Website:	Https://support.skyrouter.com
Email:	support@blueskynetwork.com
Telephone:	+1 858-551-3894