

Anker SOLIX F3000 Portable Power Station Troubleshooting & User Guide

1. Troubleshooting

What should I do if F3000 does not supply power to devices on the panel?

Here are some possible causes and solutions:

EV Mode is enabled: This mode does not supply power to the panel. Switch to a supported mode.

Overload in Bi-D (bi-directional) Mode: This mode supports up to 1,800W. Output will be reduced when the limit is exceeded. Lower the connected load and try again.

Other overload scenarios: Check for any additional connected devices or faulty equipment that may cause overload, and remove them before retrying.

After connecting F3000 to the home power grid via the bi-directional inlet, what should I do if it frequently fails to operate properly due to unstable Wi-Fi signals?

Please consider using an RS-485 wired connection. [Please describe how to purchase, prepare, and connect the RS-485 connection cable.]

Unable to find/search for the device.

Check if the IoT icon is flashing on the screen:

- If it is not flashing, press the IoT button on the device.
- If it is flashing, ensure Bluetooth is enabled and connected properly. If not, reset Bluetooth and re-connect the device.

If the issue persists, please contact after-sales support.

Unable to connect to the device or reconnect after disconnecting.

1. Confirm Password

Please ensure the Wi-Fi name and password are correct, including capitalization, special characters, underscores, spaces, and dashes.

2. Verify Time

Check if the issue occurs during the first use or after some time.

3. Bluetooth Connection

Confirm that Bluetooth is working properly.

4. Wi-Fi Connection

- a. If Bluetooth is working, try pairing via Wi-Fi and see if the router's 2.4GHz network is detected. If not, confirm your router supports 2.4GHz.
- b. Use your phone to create a 2.4GHz hotspot and verify if the device can detect it.
- c. Test Wi-Fi connectivity using another device to ensure the network is working properly.

5. Registration Location

Make sure the correct address is selected at the top right corner of the login page in the app.

6. Reduce Distance

Keep the device within 10 m (33 ft) of the router. Avoid obstructions, interference, or walls between them. Consider using a repeater or amplifier to enhance Wi-Fi signal strength.

7. Reset Wi-Fi

Press and hold the device's IoT button for about 7 seconds, then try reconnecting.

8. Contact Customer Service

If the issue persists, please contact customer service and provide the following:

- a. Device serial number (SN)

- b. User's email address
- c. App and device logs uploaded via the Anker app
- d. A video showing the network setup process
- e. Your phone model, router model, connection distance, and usage scenario

Unable to update firmware.

Ensure your network connection is working properly and the signal is strong, then try the update again.

If it still fails, please contact customer service and provide the following information:

1. Device serial number (SN)
2. User's email address
3. Video of the failed update
4. App and device logs uploaded via the Anker app

Unable to shut down.

Make sure F3000 is connected to the AC charging cable. Unplug the cable, then try shutting down the device manually to confirm it powers off normally.

The AC input/output is not self-charging.

1. Verify that the AC input voltage is normal and the IN icon and input are displayed on the screen.
2. If there is no input, the input voltage may be abnormal. Verify the input voltage.
3. If input is present but the IN icon is missing, the connector may not be properly connected. Ensure it's securely plugged in.
4. If the issue persists, please contact customer service, provide photos or videos, and upload the device log via the app.

Low AC input/output charging power.

1. Confirm the battery level and charging power.

2. Verify the charging power setting in the app is set to your desired level.
3. Confirm the power output of the charging source.
4. Monitor the battery cell temperature in the app. If the maximum temperature is below 50°F (10°C), charging power is limited to 32.7°F (0.4°C)—below 18,000W. Please provide a photo or video if possible.
5. If all conditions are normal, try disconnecting and reconnecting the battery several times to reset the system.
6. If the issue persists, upload the device logs into the app and please contact customer service for assistance.

PV input port is not charging.

1. Check if both PV ports are failing to charge or just one. If only one port is affected, identify which one.
2. Verify that the solar panel output voltage is within the PV port voltage range:
 - Low voltage: 11 - 60V
 - High voltage: 11 - 165V
3. If both PV ports are not charging, please provide the following information:
 - The solar panel connection method (e.g., series, parallel, or multiple series/parallel)
 - Solar panel specifications
 - A photo or video of the screen showing the charging failure
4. If the issue persists, upload the logs via the app and contact customer service.

The generator is connected to F3000 via the generator line but it is not charging.

1. Ensure the generator engine is running and the output voltage is normal. Use a multimeter to check the output voltage if available.
2. Confirm the generator engine is operating properly.
3. Check the F3000's screen for the aviation connector "IN" and the "input" icon:

- If no input is shown, the input voltage may be abnormal. Verify the input voltage.
- If input is present but the "IN" icon is missing, the aviation connector may not be making proper contact. Please ensure the aviation connector is fully rotated.
- If the issue persists, please contact customer service, provide photos or videos, and upload the device log via the app.

The generator is connected to the portable power station via the generator line but it is not charging stably.

1. Start the engine and check if the output voltage is normal and the engine is running under a stable load. If so, proceed with troubleshooting.
2. Reduce the charging power—start at the lowest setting, then gradually increase it once stable. If charging remains unstable after lowering the power, there may be an issue with the engine's output that requires further troubleshooting.

The generator is connected to the portable power station via the generator line and can carry load, but the generator makes abnormal noises, or the screen displays unstable input and output power.

Check Output Voltage

1. Turn on the generator and verify if the output voltage is normal.
2. Verify that the generator itself is operating normally and stably. If the load is normal and stable, proceed to the next step.

Confirm Connection Cables

Ensure that the generator is connected to the AC input/output port using the generator connection cable Anker SOLIX TT-30 Charging Cable.

Confirm the Load

If the previous steps show normal operation, please continue to the next step:

- Using the Generator Alone: Verify that the generator operates normally with the same load without the portable power station.

- Using the Portable Power station Alone: Verify that the portable power station operates normally with the same load without the generator.

Analyze Load Issues

1. Generator Load Abnormality: This indicates insufficient generator output capacity; reduce the load.
2. Generator Load Normal, but the Portable Power Station Overloads: This indicates that the load exceeds the portable power station's capacity (3.6kW maximum); reduce the load.

Connect the Generator and Portable Power Station

If both generator and portable power station operate normally, connect them, and refer to the following steps:

- Lower the charging power (start at the lowest setting, then gradually increase once stable).
- Manually enable output loads one at a time, ensuring each load is stable before adding the next.

The engine is connected to the portable power station via the engine cable and can carry the load, but the engine makes abnormal noises, or the input power displayed on the screen disappears repeatedly, or the load status changes repeatedly.

1. Please reduce the load and check if the issue persists.
2. If the issue persists, please check if the IoT icon is flashing on the screen:
 - If it is not flashing, press the IoT button on the device.
 - If it is flashing, ensure Bluetooth is enabled and connected properly. If not, reset Bluetooth and re-connect the device.

If the issue persists, please contact after-sales support.

The generator is connected to the PPS through the generator line and can be charged, but the output is turned off and cannot carry load when turned on.

Check Generator Output

1. Start the Generator and ensure the output voltage is normal. Use a multimeter to verify the voltage if available.
2. Confirm the generator is running normally and stably before proceeding with troubleshooting.

Confirm Load Conditions

1. Using the Generator Alone: Connect the same load to verify normal operation.
2. Using the Portable Power Station Alone: Connect the same load to verify normal operation.

Analyze Load Issues

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2. Generator Load Normal, but the Portable Power Station Overloads: This indicates that the load exceeds the portable power station's capacity (3.6kW maximum); reduce the load.

Connect the Generator and Portable Power Station

If both generator and portable power station operate normally, connect them, and refer to the following steps:

1. Lower the charging power (start at the lowest setting, then gradually increase once stable).
2. Manually enable output loads one at a time, ensuring each load is stable before adding the next.

Address Compatibility Issues

1. If the load still does not work after lowering charging power to minimum, contact customer service.

2. To confirm compatibility, test the load separate on either the generator or the portable power station.

Regarding the compatibility issues of engines, users are required to provide the following information:

1. Documentation of the specific operating conditions that caused the issue, such as photos or videos.
2. Upload the device logs via the app.
3. Model of the engine or a clear image of the nameplate, along with the rated power and maximum charging power settings from the mobile app.
4. Model, specifications, and a nameplate image of the connected load.

EV Charging Adapter cannot charge.

F3000 will not charge via the Anker SOLIX EV Charging Adapter in the following cases:

1. **Standby Mode:** Charging will only begin after pressing any button on F3000 to wake it up.
2. **Power-Off Mode:** Charging will only begin after manually turning on F3000 or activating AC/PV charging.
3. **0% Charge:** Charging will only begin after F3000 has been charged via AC/PV to at least 1%.

No AC output.

1. Troubleshoot the Cause
Look for overload, overheating, partial UPS output failure, or inverter failure.
2. Confirm Load Status
Review load type, load specifications, power level and icon displayed on the screen, and duration.
3. Monitor Battery Cell Temperature
Use the app to check battery cell temperature. If it exceeds 136.4°F (58°C), the AC output will stop and a high temperature warning will show on the LCD display.

4. Troubleshoot the Inverter

Plug in the AC charging cable. If charging is enabled and the circuit is normal, the inverter output may be faulty.

5. Contact Customer Service

If the issue persists, upload device logs via the app, record a video, and contact customer service.

AC output is off.

Check Battery Level

1. If the battery level is less than 2%, the AC output is normally shut off.
2. If the battery level is above 2%, proceed to the next step.

Confirm Output Power

1. Output power < 20W
 - a. If no power plug is connected and power is not displayed on the screen, AC output will shut off automatically after 15 minutes.
 - b. If a power plug is connected but AC output remains off after 15 minutes, enter test mode, turn on the inverter, connect the power plug, and check for the power plug icon on the screen.

If the power plug icon appears, proceed to the next step. If not, the outlet is likely faulty.

2. Output power > 20W

Confirm if the LCD screen displays an overload or temperature warning icons.

- a. If high or low temperature icon appear, enter test mode and check battery cell temperature to verify overheating.
- b. If no warning icons appear, follow the troubleshooting steps below.

Restart the AC Switch

Confirm whether it can be restarted.

1. Restartable: Follow the troubleshooting steps below.
2. Restartable: Connect the AC charging cable to confirm normal charging. If charging is possible, it indicates an AC output failure.

Check the Device's Operating Mode

1. If operating in bypass mode, check whether the AC power is normal. Then check the screen for an overload icon and confirm whether the output exceeds 12A (low-voltage version) or 10A (high-voltage version).
2. If operating in inverter mode, check the screen for an overload icon and confirm the device's power.

Contact Customer Service

If the issue persists, upload the device logs via the app and contact customer service.

The car charger port/Anderson port cannot output or is disconnected.

Check the Battery Level

Use the app's homepage or the product's LCD screen to confirm that the battery level is approximately 2%.

Check Temperature Warning Icons

Check if the high and low temperature warning icons appear on the LCD screen.

If either icon appears, enter test mode to check the car charger port temperature or battery cell temperature.

Check the Overload Alarm

If the overload alarm icon appears on the LCD screen, follow these steps:

1. Remove the load, restart the car charger port, and confirm output.
2. Restart other output ports and confirm that they are functioning properly.

If the car charger port still has no output after removing the load, with no temperature alarms present, and other ports work properly, use a pin to press the reset and hole and check if output resumes.

Contact Customer Service

If the issue persists, upload the device logs using the app and contact customer service.

USB-C or USB-A port is not charging.

1. Try a different charging cable or device.
2. Try charging using a different USB-C or USB-A port.
3. If the issue persists, please upload the device logs via the app.

Transition abnormalities or charges suddenly jump.

Discharge Jumps:

1. Verify whether the discharge jump occurs at the end of the device, the usage conditions at the time of the jump, and the actual jump amount.
2. Upload device logs via the app and contact customer service.

Charge Jumps:

1. Verify whether the charge jump occurs at the end of the device—a jump from 90% to 100% when the charge level is greater than or equal to 90%.
2. Verify product purchase date, usage duration, frequency of use, and common usage scenarios.
3. Upload device logs via the app and contact customer service.

Bright lines appearing on the screen.

Bright lines may appear after removing the protective film, but they do not affect normal use.

Display is showing abnormalities.

1. Verify that all output icons on the LCD screen are illuminated normally.
2. Verify that the issue occurs during first use after receiving and activating the device.
3. Power off and reactivate the device, or reset it.
4. Perform a factory reset using the app.
5. If the issue persists, please contact customer service.

The screen does not display the discharge power.

Please confirm whether the AC output is in use and whether the power of the connected AC device is less than 25W. If it's under 25W, it is normal for the discharge power not to be displayed. The device only shows output power when the AC output exceeds 25W.

Short discharge time, low capacity, or fast power loss.

1. Confirm the user's usage conditions, especially if they're using low-power AC devices.
2. Inverter power loss will be greater when using low-power AC devices.
3. To troubleshoot, fully charge the inverter and test the discharge time using a high-power device, then compare it to the advertised runtime.

EV function does not work.

Confirm the Correct Operation:

- Unplug the AC charging cable.
- Turn off the inverter.
- Manually double-click the AC switch.
- Verify that the car icon appears on the screen.

Check the EV Output Voltage:

If the issue persists, double-click the AC switch again. Then use a multimeter to measure the EV terminal output voltage. A normal reading shows N-PE resistance around 0 Ω , indicating proper EV function.

1. If the EV function is normal but an overload warning appears while charging, it indicates a compatibility issue.
2. If the issue persists, please contact customer service to arrange a return.

The battery level is displayed as 0.

1. Determine when the screen issue occurred, whether it occurred during initial use or after a period of use.
2. Check whether the portable power station shuts down when not connected to an external power source.
3. Check whether the screen displays the charging power normally when the portable power station is connected to an external power source.

4. If the issue persists, please contact customer service and provide a video of the product being connected to an external power source. Also, upload device logs via the app.

Battery pack displays abnormality.

1. Verify that the battery pack icon on the F3000 screen is displaying correctly. If not, reconnect the battery pack cable.
2. If the display issue persists after reconnecting, ensure the F3000 and the battery pack ports are free of debris and the pinouts are correct. If the issue persists, contact customer service to arrange a return.

Fan is rotating abnormally.

1. Determine when the fan started rotating abnormally, whether it occurred during initial use or after a period of use.
2. If fan noise occurs after a period of use, please describe the current abnormality, including the device's charge and discharge status, load power, load time, and ambient temperature.
3. Upon receipt, check if there were any unusual noises when powering on, and confirm the packaging and device were intact.
4. To troubleshoot, turn off both input and output switches:
 - Use the app to check the battery cell temperature. If the battery cell is overheated and the fan stops after turning off the input and output, this indicates that charging and discharging caused the battery cell to overheat, leading to abnormal fan rotation.
 - If the fan continues to rotate after turning off the input and output, it indicates a fan fault.
5. If the issue persists, please contact customer service and upload device logs via the app.

How is Anker SOLIX F3000 reset to factory settings?

1. Use a paperclip or a pin to press into the reset hole for 1 second.
2. Log into the Anker app. Go to Settings, then select "Restore Factory Settings".

After I turned off the engine, the F3000 kept losing power. How can I solve this problem?

1. Turn off the generator's AC breaker.
2. Remove the TT-30 charging cable.
3. Turn off all ports on F3000 when not in use.

Why does Anker SOLIX F3000 charge so slowly in a low ambient temperature?

Charging slows in cold temperatures to protect the battery:

- Under 41°F (5°C), max 450W
- 41-48.2°F (5-9°C), max 1,200W
- At 32°F (0°C) or below, charging stops and a low-temperature warning appears

What is the process to install the current transformers and Anker SOLIX F3000 correctly?

1. Installing two F3000 units:
Ensure the two F3000 units are connected to different phases.
2. Before installing CTs:
Check the labels on the CTs carefully and install them on the corresponding cables:
 - CT-L1 connects to L1.
 - CT-L2 connects to L2.
 - CT-B1 and CT-B2 connect to the corresponding branch cables.
3. Troubleshooting incorrect connections:

Below are common incorrect connection scenarios to help identify potential issues:

Error 1: 2 inlet boxes/F3000 are connected to the same phase.

Error 2: 2 CTs are on the main cable, 1 CT is on the branch cable.

Error 3: 1 CT is on the main cable, 2 CTs are on the branch cable.

Error 4: 1 CT is on the main cable, no CTs are on the branch cable.

Error 5: No CTs are on the main cable, 1 CT is on the branch cable.

Error 6: 2 CTs are on the main cable, no CTs are on the branch cable.

Error 7: No CTs are on the main cable, 2 CTs are on the branch cable.

2. User Guide

How long can Anker SOLIX F3000 provide long-lasting backup power?

F3000 features a 3kWh capacity and low power consumption that leads the industry. One F3000 can power a 190W fridge for 42 hours. Add a generator, and F3000 could power your home indefinitely while you have fuel.

How does Anker SOLIX F3000 3,600W pass-through charging work with my generator?

F3000 works with most 120V generators on the market if it has a TT-30 plug or adapter. Use pass-through charging to charge and discharge simultaneously, avoiding power interruptions.

Log onto the Anker app to set the generator's power rating.

How does Anker SOLIX F3000 provide 240V output?

F3000 only provides 120V output by itself. For 240V output, connect two F3000s together with a double voltage hub.

How can I lower electricity bills with Anker SOLIX F3000?

F3000 features self-locking outlets and a smart meter to prioritize solar power for daily use.

Enable TOU(Time of Use) mode to charge when prices are low and power when prices are high.

F3000 has two PV inputs, supporting 2,400W of solar for appliances.

Can Anker SOLIX F3000 be used with expansion batteries?

Yes, one F3000 supports up to three BP3000 Expansion Batteries. Total maximum capacity is 12,288Wh.

Can the BP3000 expansion battery be used with other Anker power stations?

No, the BP3000 expansion battery is only compatible with the Anker SOLIX F3000.

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No, F3000 is only compatible with the BP3000 Expansion Batteries.

Does Anker SOLIX F3000 need to be activated before its first use?

Yes, before using Anker SOLIX F3000 for the first time, you need to charge it to activate it. Once activated, unplug the AC cable, and power F3000 on or off as needed.

What types of solar panels can I use to charge Anker SOLIX F3000?

F3000 has two solar input ports: a high-voltage input (11 - 165V) and a low-voltage input (11 - 60V), supporting up to 2,400W total solar input.

- For the high-voltage port, panels must have a voltage between 11 and 165V. Up to four 400 - 500W panels can be connected in series, totaling up to 1,600W.
- For the low-voltage port, panels must have a voltage between 11 and 60V. Up to two 400W panels can be connected in parallel, totaling up to 800W.