

EBOOST FIRMWARE UPDATE PROCEDURE

PRE-REQUIREMENTS

To perform this procedure, you will need the following:

1. Windows Laptop Computer
2. USB CANtool
 - a. You may request this tool by submitting a ticket on the support section at www.fortresspower.com/support



Download the firmware and instructions before arriving to the site. You may download these files at www.fortresspower.com/firmware. Try to consolidate your files under one folder called “**eBoost CAN Upgrade Package**” for ease of access. **Extract all files.**

3. Install Microsoft.VisualStudio.C++.8.0 located in the folder
4. Install Microsoft.VisualStudio.C++.9.0 located in the folder

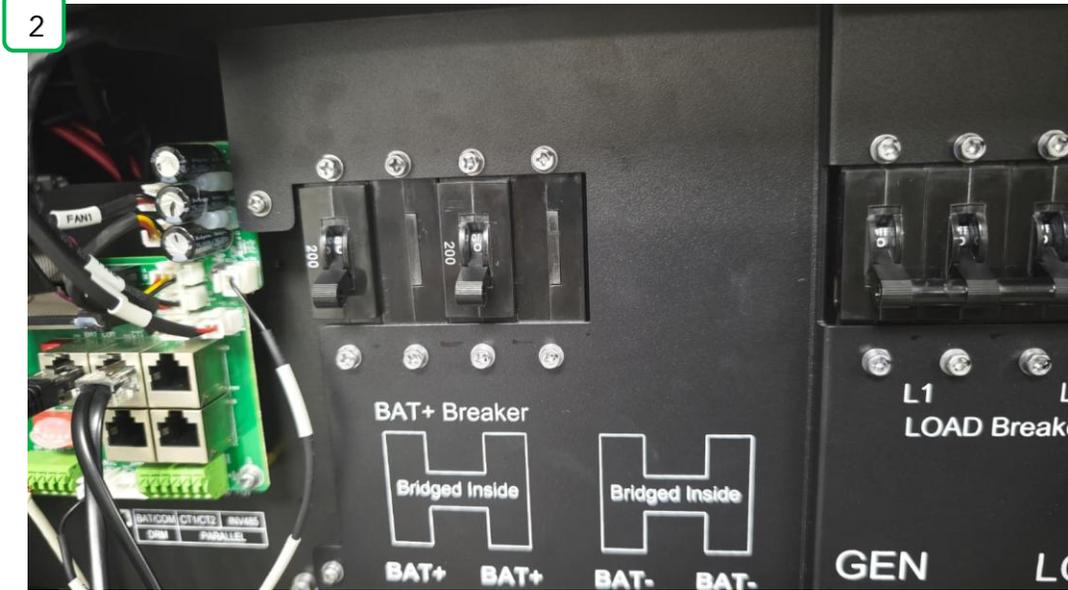
INSTALLING THE DRIVERS FOR THE CANTOOL (USBCAN)

1. Connect the USB cable of the CANtool (USBCAN) to your computer and the CANtool by itself.
2. Install USBCAN_AllInOne_x86_x64_2.0.0.1

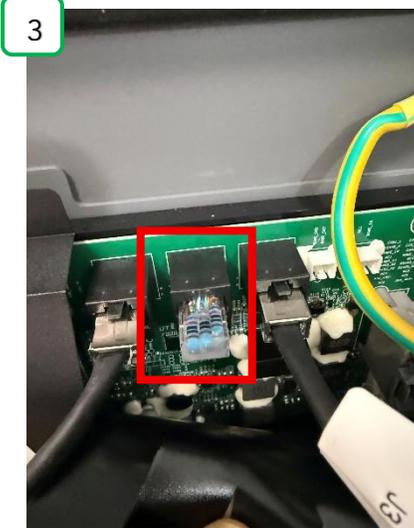
There must be no current flow to or from any battery in the system during the firmware update process. It is a good idea to have battery breakers on all inverters in the system in the 'OFF' position.

Firmware must be updated on one battery at a time. It is not necessary to disconnect battery to inverter cable.

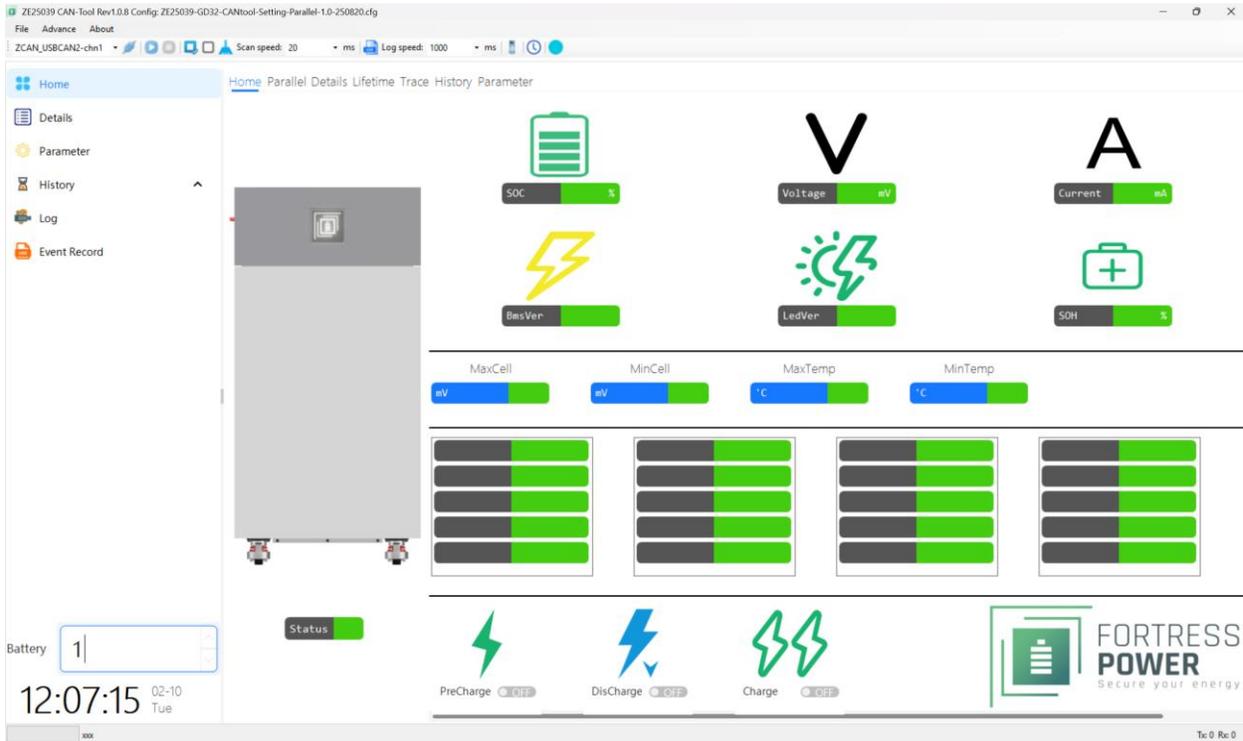
1. Make sure that both cables that came with the CANtool (USBCAN) are connected to the CANtool. Then, make sure that the USB cable is connected to the computer and that the ethernet cable is connected to either of the two ethernet ports.
2. Turn off the inverter battery breakers. In off-grid applications, this will shut down the loads.



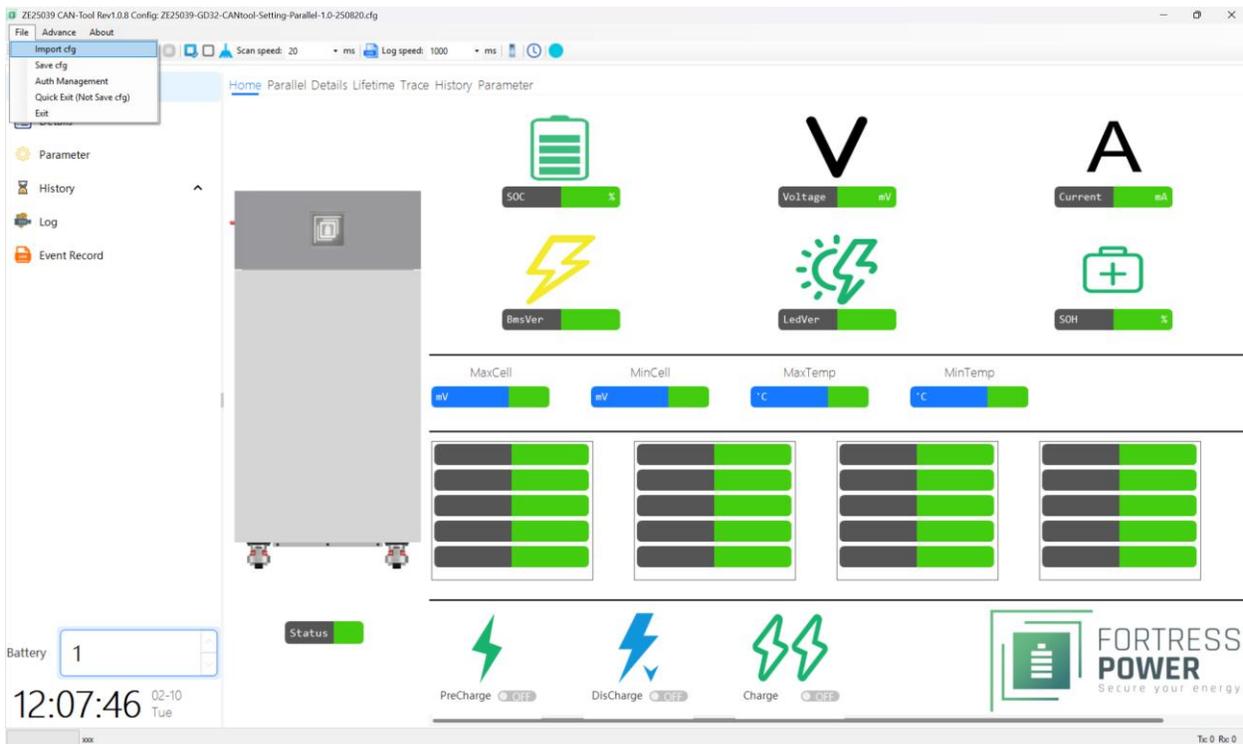
3. Remove the Terminator from the battery.
4. Insert the CAN TOOL at the port where the terminator was removed.



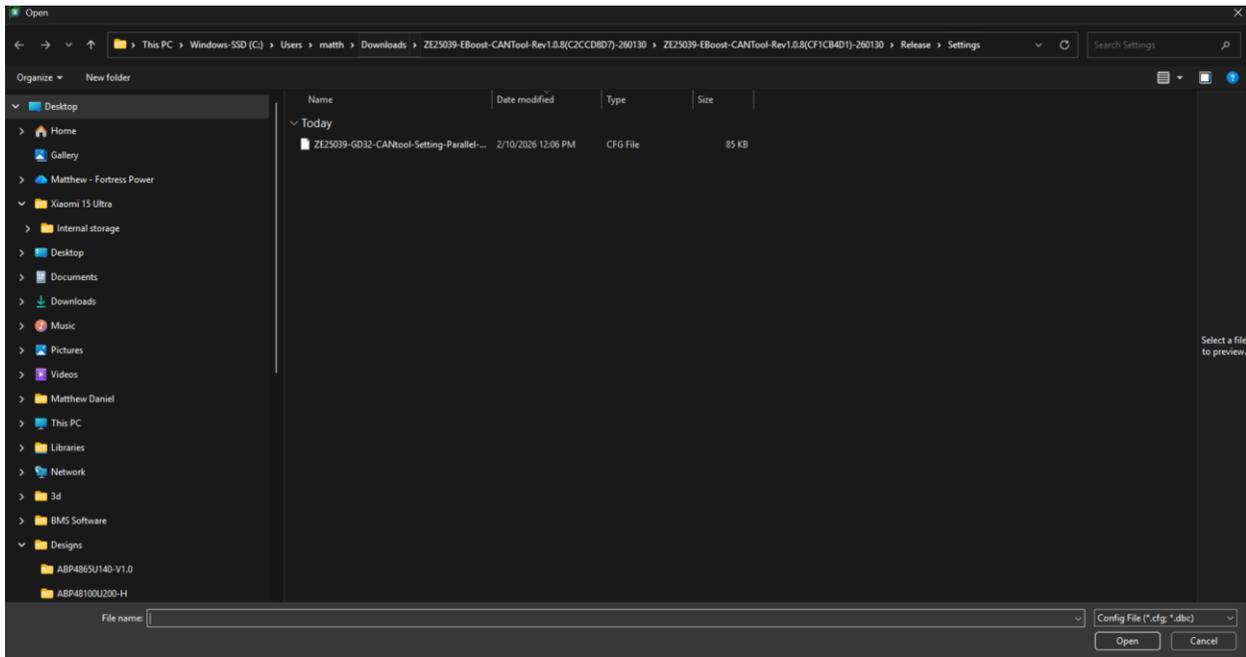
- Open the computer software under the Upper Computer Software folder. Select the CANTOOL file. The home page will appear.



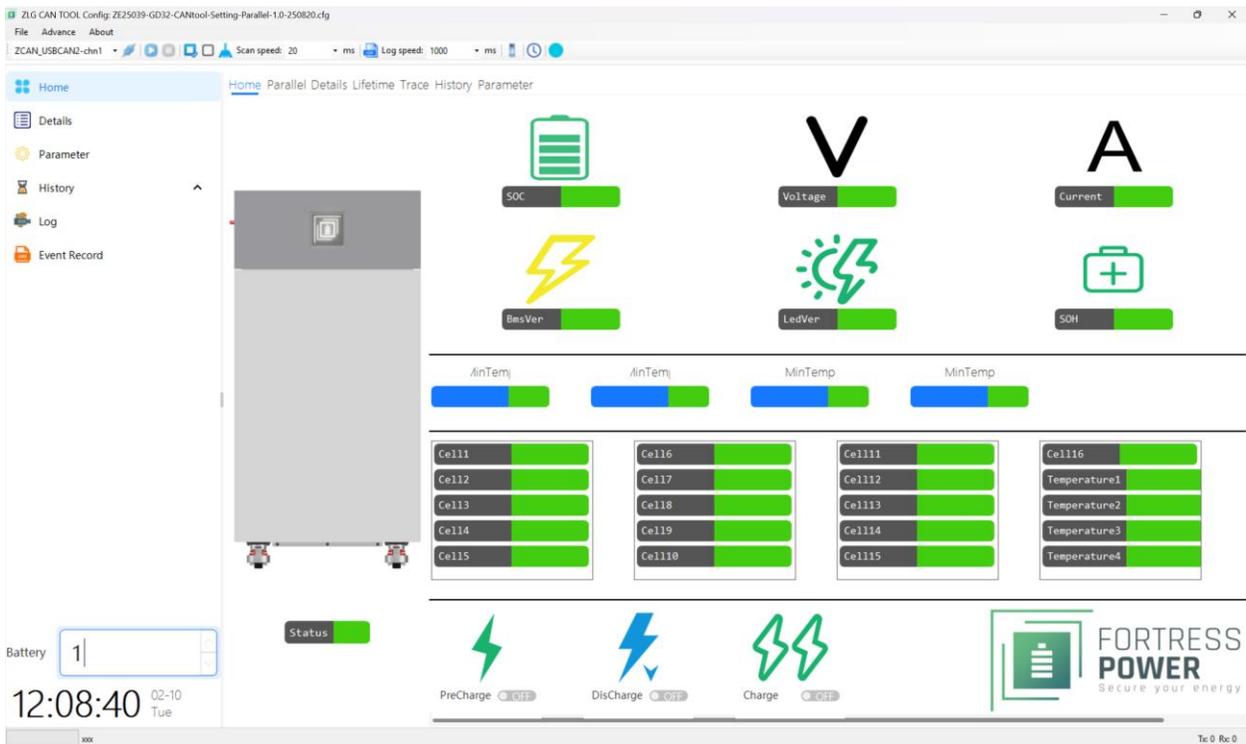
- Go to the "File" section and click on "Import cfg"



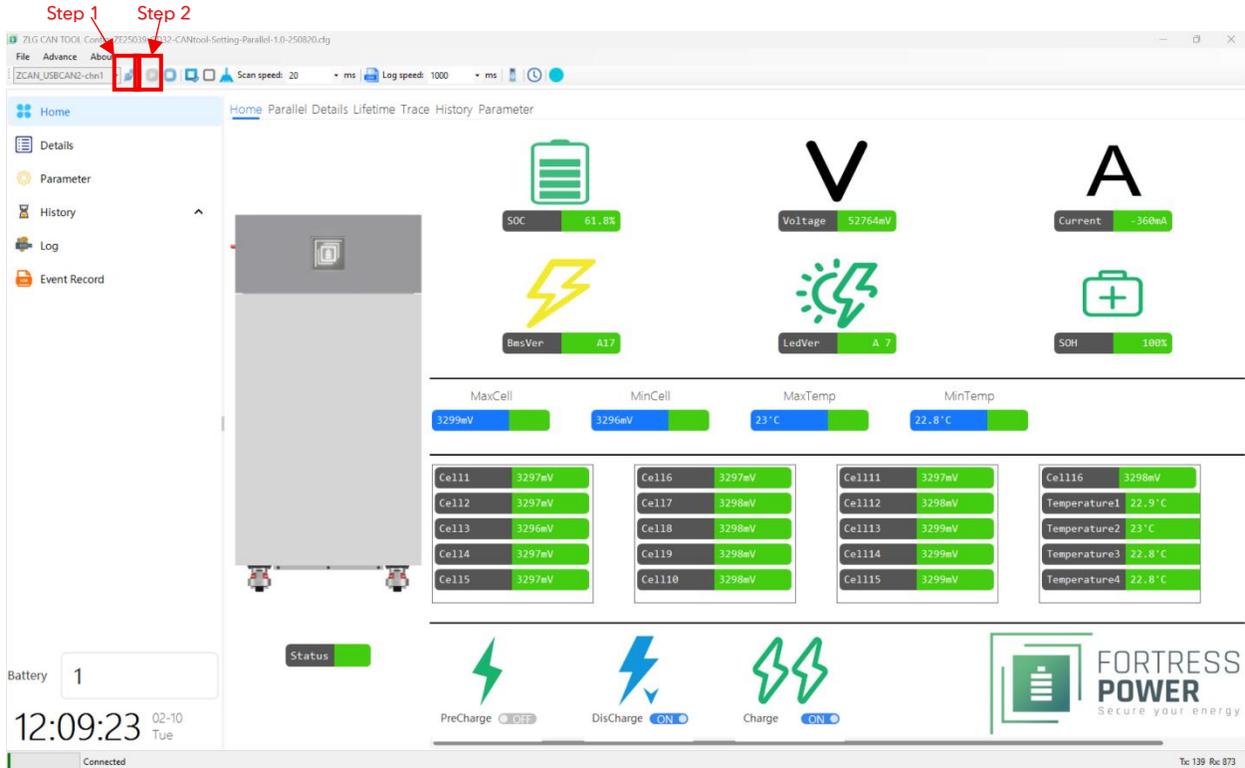
7. Select and open the file "ZE25039-GD32-CANtool-setting-parallel"



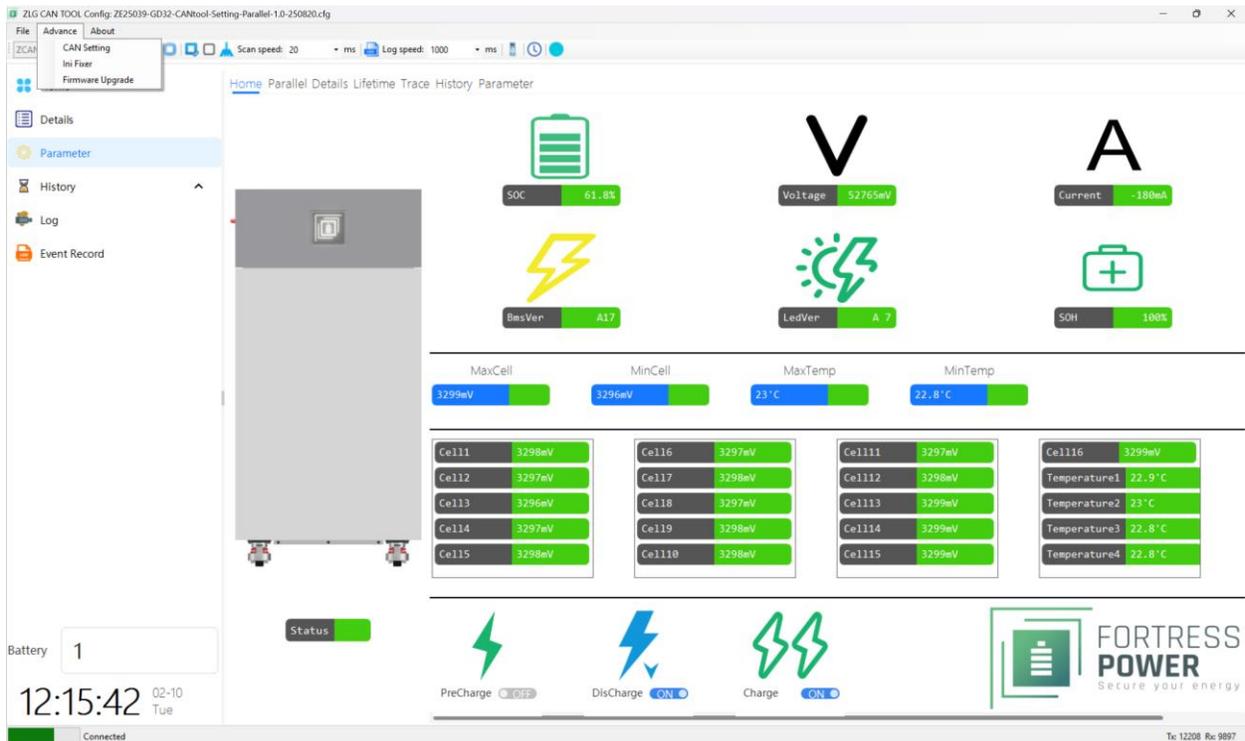
8. After you open the file, you will notice that the parameter displays changes.



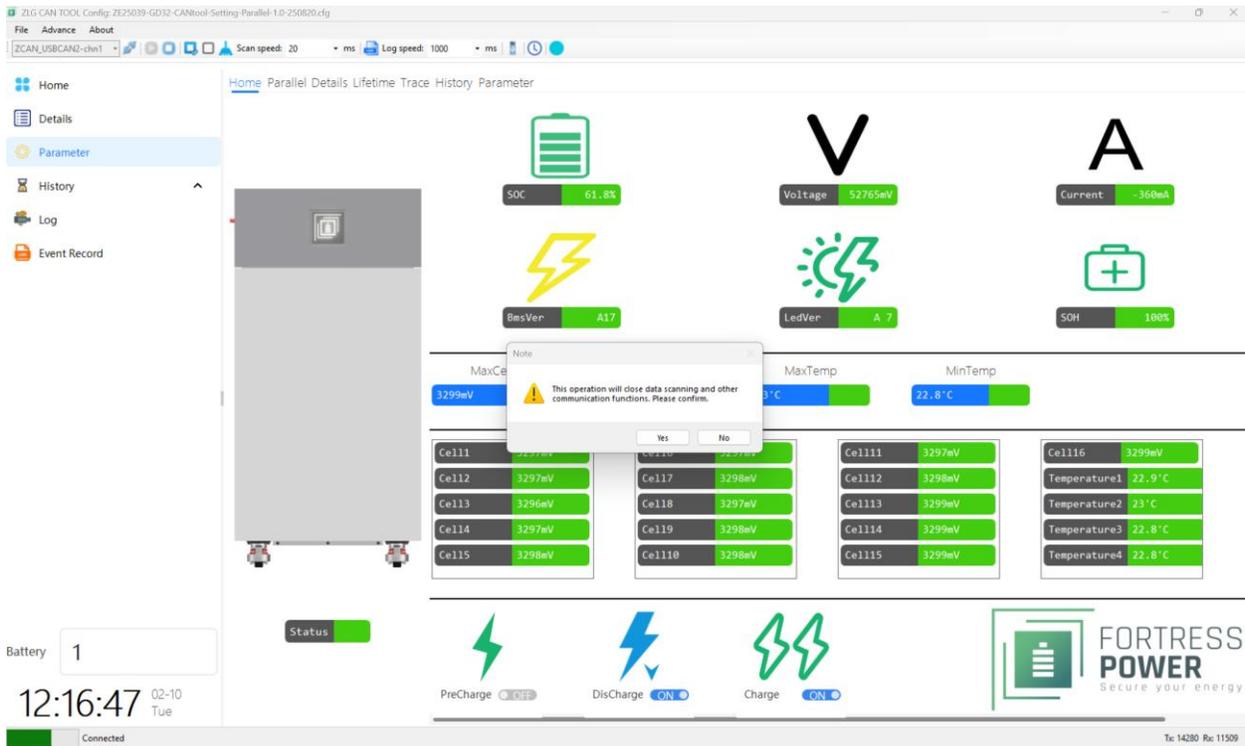
- Select the **"Connect"** indicated in **step 1**, then select the **"Read"** button indicated in **"Step 2"** button



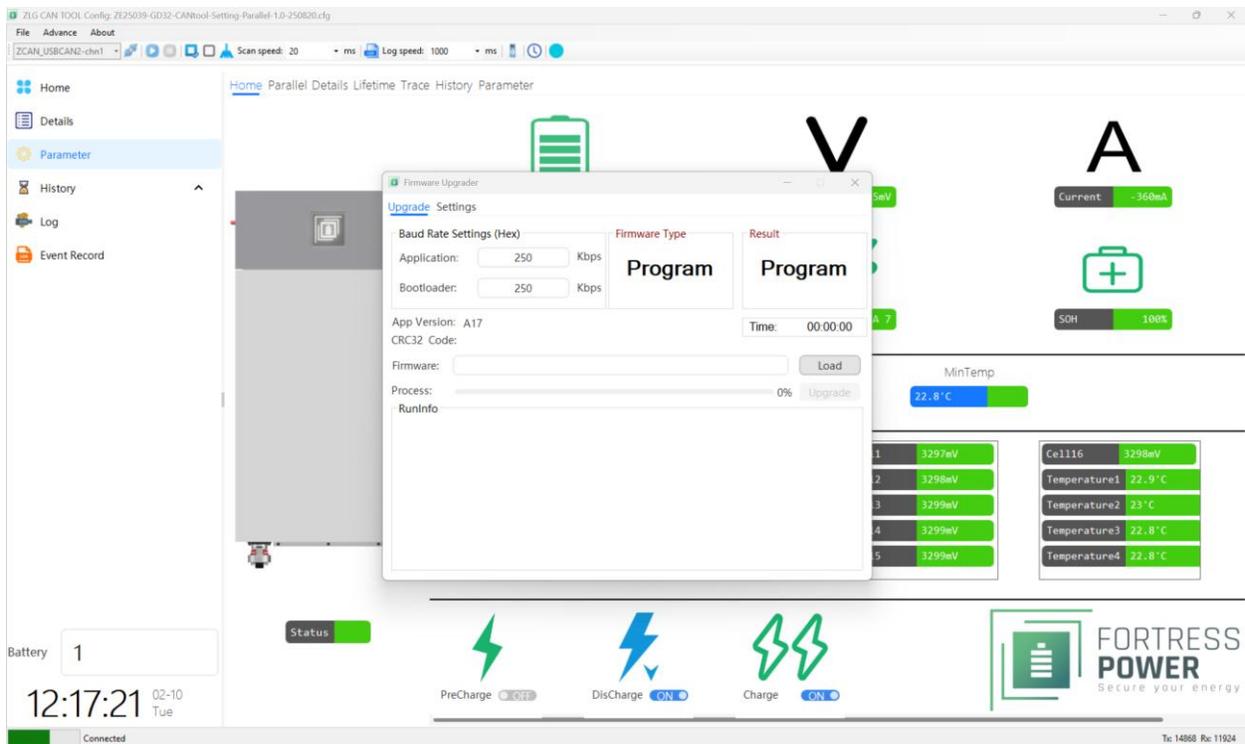
- Go to the **"Advanced"** section and select **"Firmware Upgrade"**



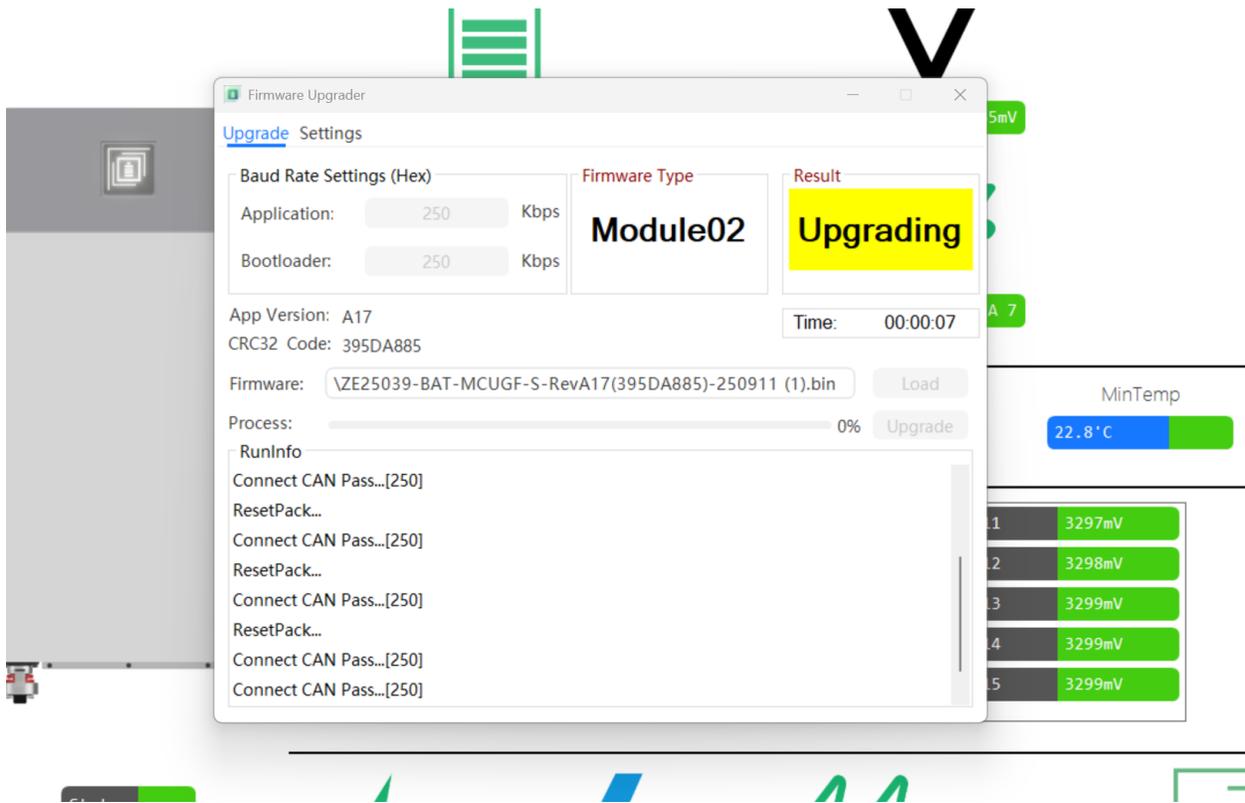
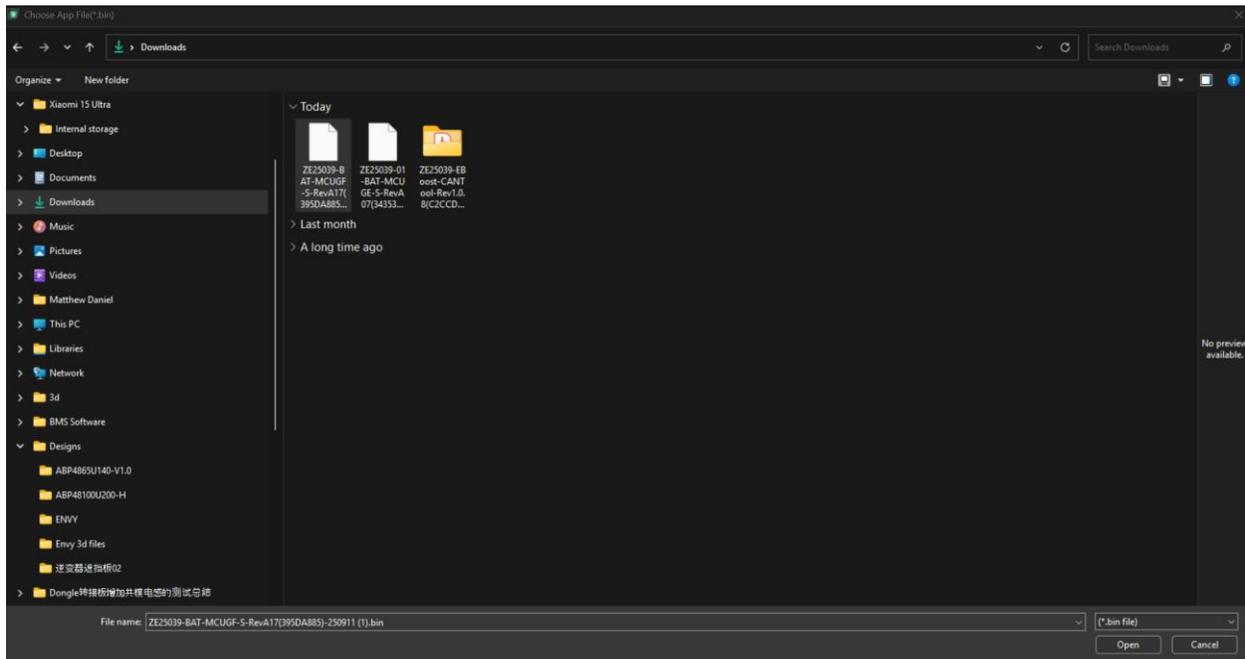
11. A message prompt will appear, please select "yes".



12. Select Load, and open the firmware file



13. Select the Upgrade button. An upgrade message will appear following the percentage bar progressing. The update takes about 2 minutes. DO NOT INTERRUPT THE UPDATE PROGRESS.



14. To confirm that the update progresses a finalized:
- a) Under the result tab, you will see a PASS message
 - b) Progress bar reached 100%
 - c) Battery rebooted

The screenshot shows the 'Firmware Upgrader' application window. At the top, there is a title bar with the text 'Firmware Upgrader' and standard window controls. Below the title bar, the word 'Upgrade' is underlined, followed by 'Settings'. The main interface is divided into several sections:

- Baud Rate Settings (Hex):** A section with two input fields. The first is labeled 'Application:' and contains the value '250' followed by 'Kbps'. The second is labeled 'Bootloader:' and also contains '250' followed by 'Kbps'.
- Firmware Type:** A section displaying 'Module02' in a large, bold, black font.
- Result:** A section displaying 'PASS' in a large, bold, green font.
- App Version:** A label 'App Version: A17'.
- CRC32 Code:** A label 'CRC32 Code: 395DA885'.
- Time:** A label 'Time: 00:02:01'.
- Firmware:** A text input field containing the file path '\\ZE25039-BAT-MCUGF-S-RevA17(395DA885)-250911 (1).bin' and a 'Load' button to its right.
- Process:** A progress bar that is completely filled with blue, indicating 100% completion, and an 'Upgrade' button to its right.
- RunInfo:** A scrollable text area containing the following log entries:
 - Connect CAN Pass...[250]
 - Connect CAN Pass...[250]
 - Send FW Packet Information...
 - Send Upgrade Data...
 - Total number of packages: 113
 - Single package length: 2048
 - Wait Upgrade Done...
 - Upgrade Done!

15. Finally remove the Can Tool and recommission the system.