



Troubleshooting Dyness Batteries in Connection with GoodWe Inverter



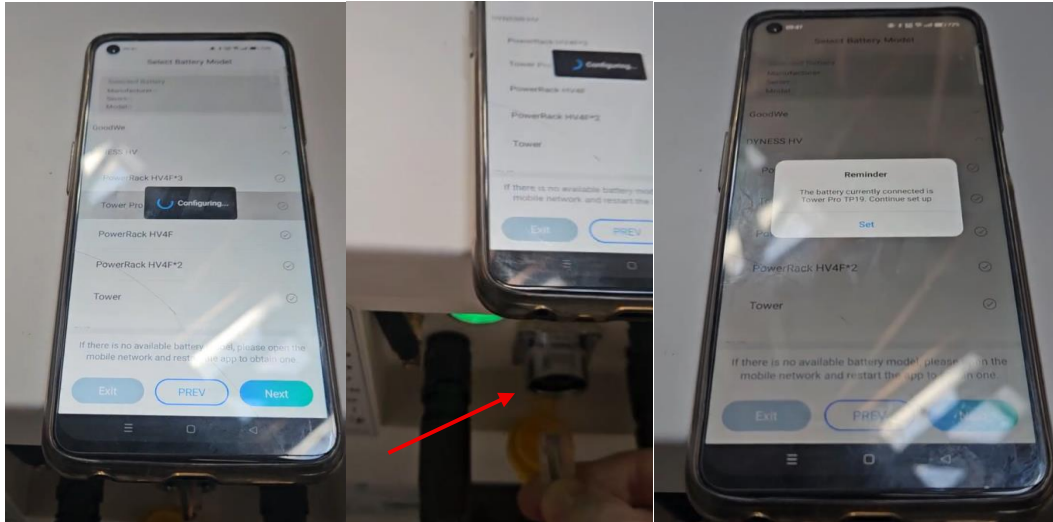
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1. Replacing the original (gray) GoodWe communication cable with another one crimped in B RJ485 standard or (black) one supplied with the battery.



*The inverter has an RJ45 socket at the factory-installed location.

2. After powering on the energy storage and inverter, disconnect the communication cable from the Dyness control module, then reconnect it. It's best to do this during the configuration (Solar GO) by selecting the Dyness Tower PRO battery. The reset enables communication reset and device detection.

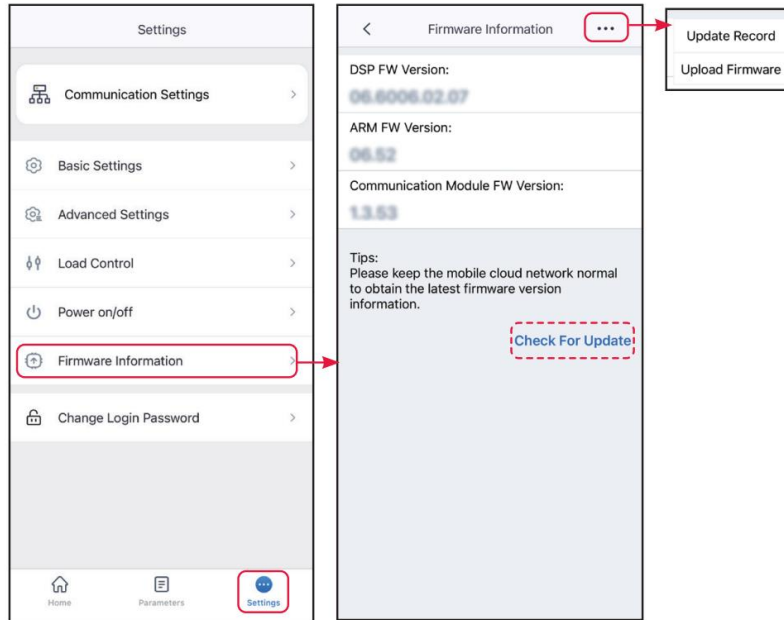


Select Tower PRO battery | Unplug and plug the connector | Device detection.

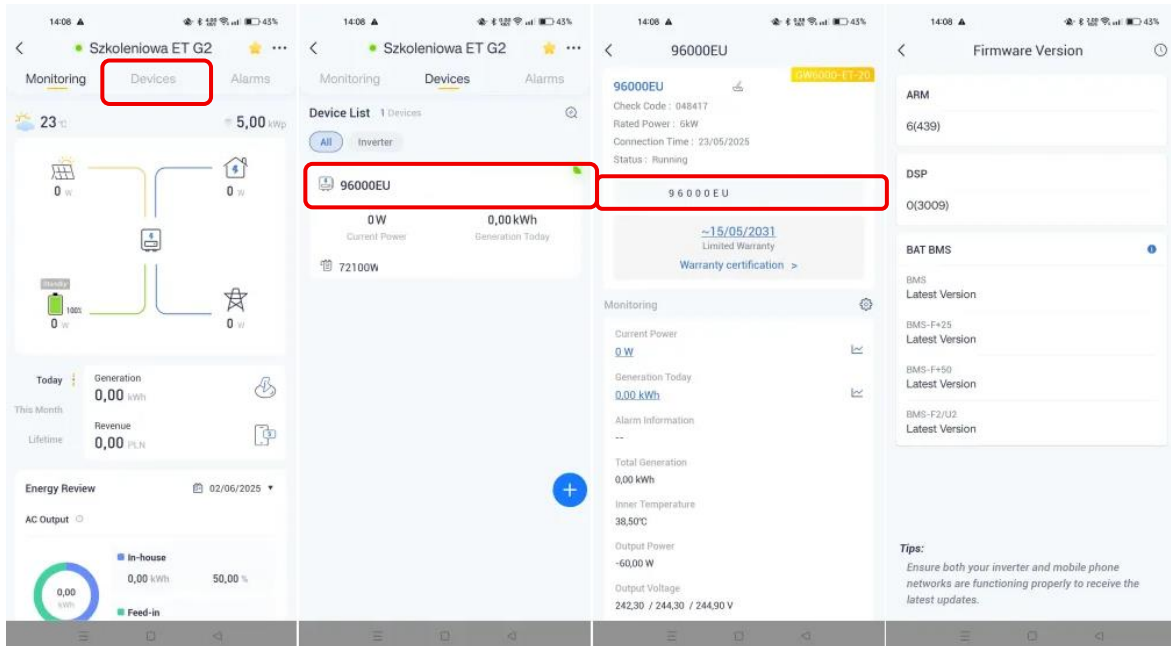
**Dyness units manufactured after 06.2022 have a baudrate of 500K. The correct setting for this battery is Dyness Pro. If the Dyness Tower variant is selected, disconnection may occur over time!*

3. No communication between Dyness and GoodWe ET 20 (G2) may result from outdated firmware. The inverter requires at least ARM version 13 to detect the battery.

The update can be performed locally via the SolarGo app by connecting to the inverter. After the update, the ARM FW Version must be at least 13.



The update can also be done remotely via the Sems+ app.



4. Checking the DipSwitch settings. If steps 1–3 do not help, verify the DipSwitch position inside the BMS housing. Before opening the BMS housing, it must be disconnected from the battery and the inverter.

After opening the housing (unscrewing the hex screws), the DIP switch will be visible and should be set by default as shown below: 1-OFF 2-ON. Replace the BMS cover before powering on.



DIP 2 (Default)

5. SOC fluctuations result from differences in module charge levels in the battery tower. The BMS determines SOC based on the charge level of individual cells. If during charging a cell reaches $\approx 3.6V$, the BMS sets SOC to 100%.

In the case of discharge, a voltage of $\approx 3.1V$ indicates 10% SOC. Cell charge levels can be monitored via the Dyness monitoring platform. The most common causes of SOC fluctuations are:

- a. Incorrect energy storage balancing procedure after system expansion.

Instructions for storage expansion and balancing

- b. Building a tower from different battery module types. Compatibility verification of battery modules can only be confirmed by the manufacturer based on the SN of the modules. Contact: Dyness Service service@dyness-tech.com. Modules will be compatible after updating – see expansion instructions.
- c. Battery module failure. Modules with a faulty balancing circuit may cause SOC fluctuations. Failure verification is possible through analysis of the module's performance. Such a tower must be added to the monitoring system. Once added, contact: support@keno-energy.com or directly to the manufacturer: service@dyness-tech.com