
Energy Management System Guide

This guide explains how to configure customer-accessible EMS (Energy Management System) settings using the GivEnergy App or Monitoring Portal. Correct configuration helps minimise grid usage, reduce energy costs, and ensure your battery system behaves as expected.

What Is the EMS and How Does It Work?

The EMS is a communication and control layer that coordinates your inverters, batteries, and meters. It monitors:

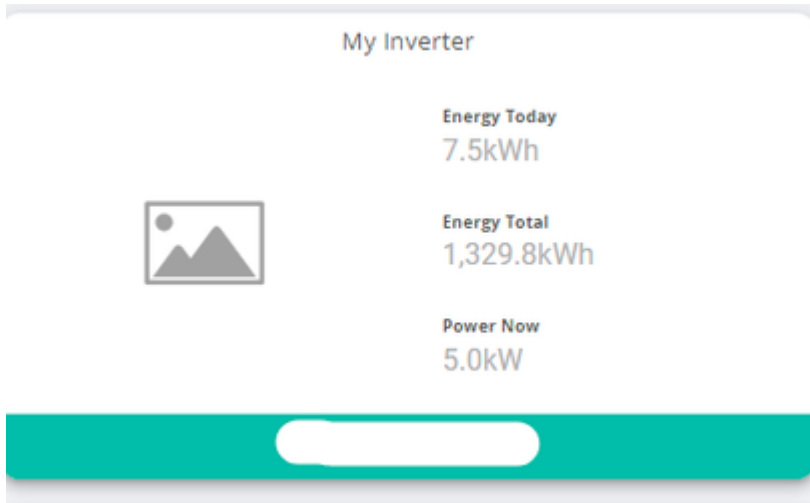
- Grid import and export
- Solar (PV) generation
- Battery state of charge (SOC)
- Optional heat-pump or load metering (if installed)

Using this information, the EMS instructs each inverter how much power to charge or discharge, while keeping batteries balanced across the system.

How to Access EMS Settings

Using the Monitoring Portal

Navigate to:



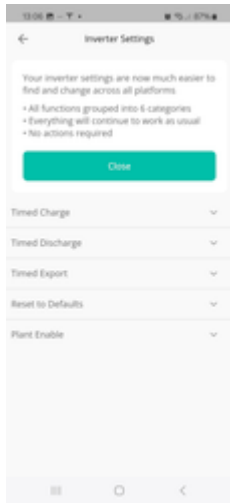
- **Dashboard → Inverters**



- Select the inverter card to open the EMS settings page

Using the GivEnergy App

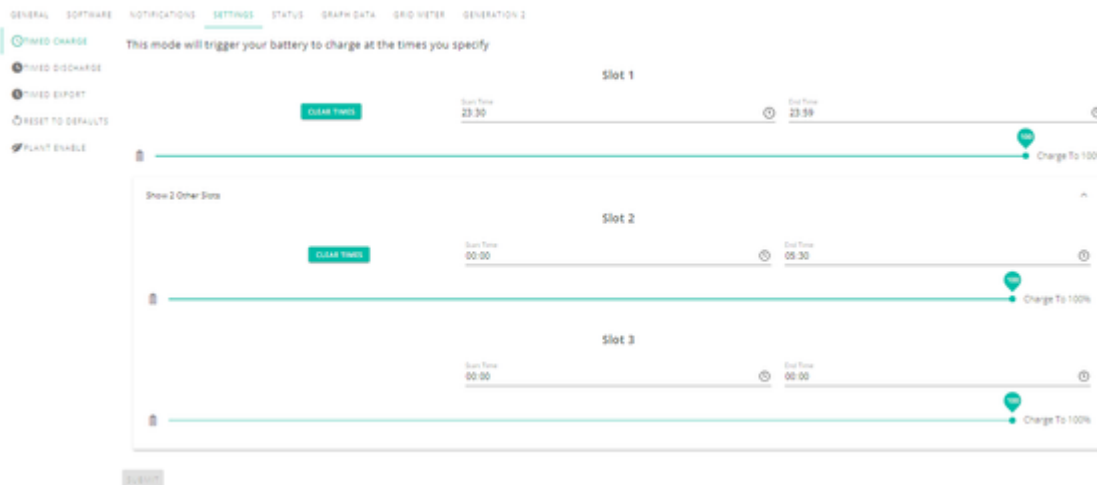
From the home screen:



- Select the **cog icon** in the top-right corner]
- This opens the inverter and EMS settings page

Setting Up Timed Charge

Timed Charge allows your battery to charge during low-cost electricity periods.



Important rules:

- Charge times must sit within a single 24-hour day
- Charge slots cannot cross midnight

If your tariff spans midnight (for example 23:30–05:30), split it into two slots:

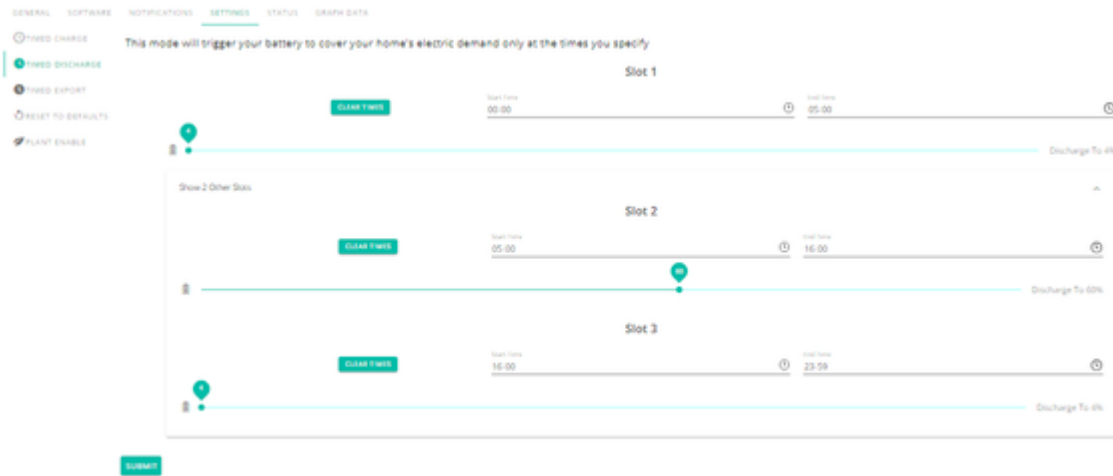
- **Charge Slot 1:** 23:30 → 23:59
- **Charge Slot 2:** 00:00 → 05:30

This applies equally in the App and the Portal.



Setting Up Timed Discharge

Timed Discharge controls when the battery supplies energy to your home.



- Discharge times must also remain within a single 24-hour period
- Multiple discharge slots can be used throughout the day
- Timed Discharge is overridden by Timed Charge or Timed Export

Example configuration:

- **Slot 1:** 00:00–05:00 → Target SOC: 4%
- **Slot 2:** 05:00–16:00 → Target SOC: 60%
- **Slot 3:** 16:00–23:59 → Target SOC: 4%

Once the target SOC is reached, the system will revert to grid use but will still charge from excess solar if available.



Setting Up Timed Export

Timed Export allows you to export stored energy during high-value export periods.



Key points:

- Timed Export overrides Timed Discharge

- Once the export target is reached, the system will not resume discharge automatically
- You must manually reset the export slot to return to normal discharge behaviour

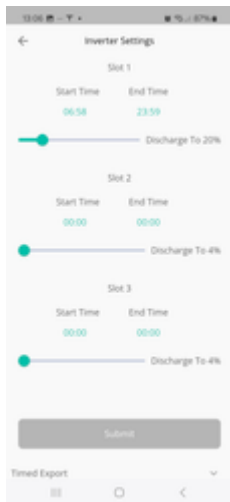
Example:

- Export window: 16:00–19:00
- Export target SOC: 33%

Export duration depends on:

- Total battery capacity
- Current SOC
- Configured export power per inverter

Higher stored energy allows export for longer periods at full power.



Best-Practice Tips

- Align charge slots with your cheapest tariff periods
- Use discharge targets to protect battery longevity

- Adjust export targets seasonally as usage and generation change
- Make small changes and observe behaviour before refining further

When to Contact Support

Contact GivEnergy Support or your installer if:

- Schedules do not apply as expected
- The system does not follow configured charge or discharge behaviour
- You are unsure whether your tariff structure is compatible with your settings

<https://givenergy2025.zohodesk.eu/portal/en/kb/articles/energy-management-system-guide>