PESS ENERGY

PESS App Monitoring

User Guide

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INTRODUCTION

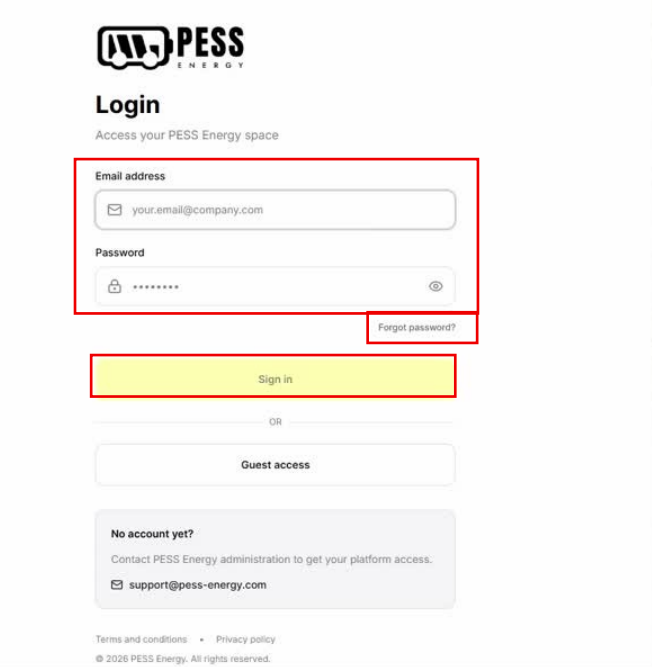
This document explains, through screenshots, how to use *PESS App*, the web monitoring application developed by PESS Energy for its zero-emission Powerbanks.

The platform's primary purpose is to give you real-time visibility into your PESS Energy zero-emission Powerbanks: charge state, power produced and consumed, GPS location, and discharge history. It also provides advanced management features, including charging parameter configuration, geographic surveillance zones, user management with access rights, and a centralized alert system so you're notified immediately of anything requiring attention.

This guide walks you step by step through each of these features.

CONNECTION

To log in to PESS App: https://app.pessenergy.com/





FLEET MANAGER – OPERATOR

To log in as a *Fleet Manager* or *Operator*, please enter the credentials you used to register on the platform:

Email

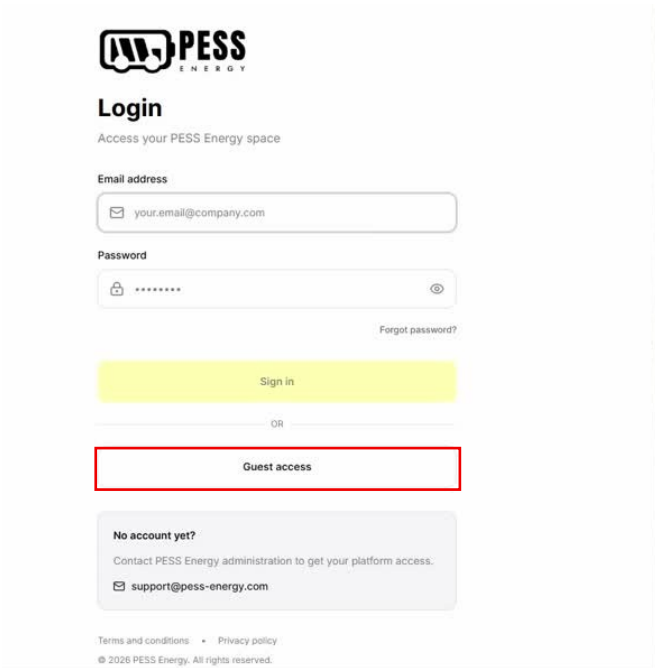
Password

Click *Sign In*

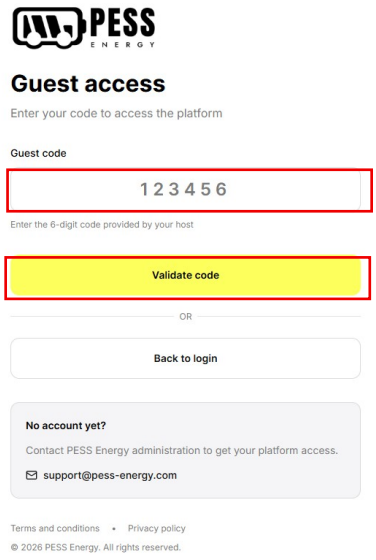
If you've forgotten your password, click *Forgot password ?*

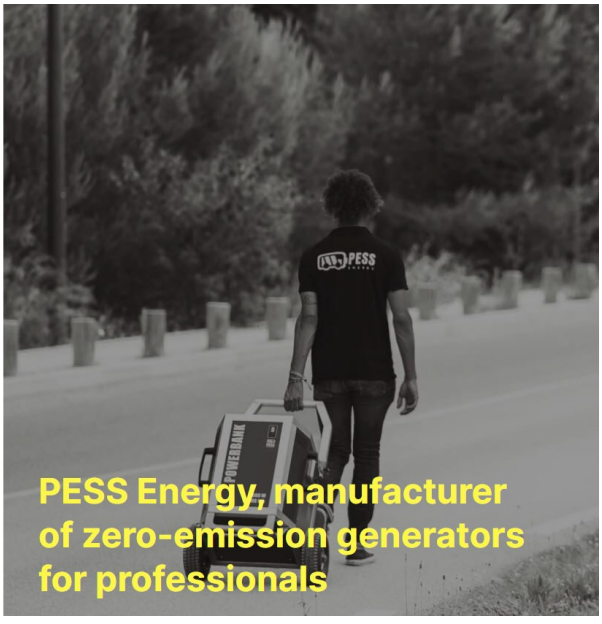
GUEST

To log in as a *Guest*, click *Guest access* et enter the temporary *Guest Code* you received by email. Then click *Validate Code*.



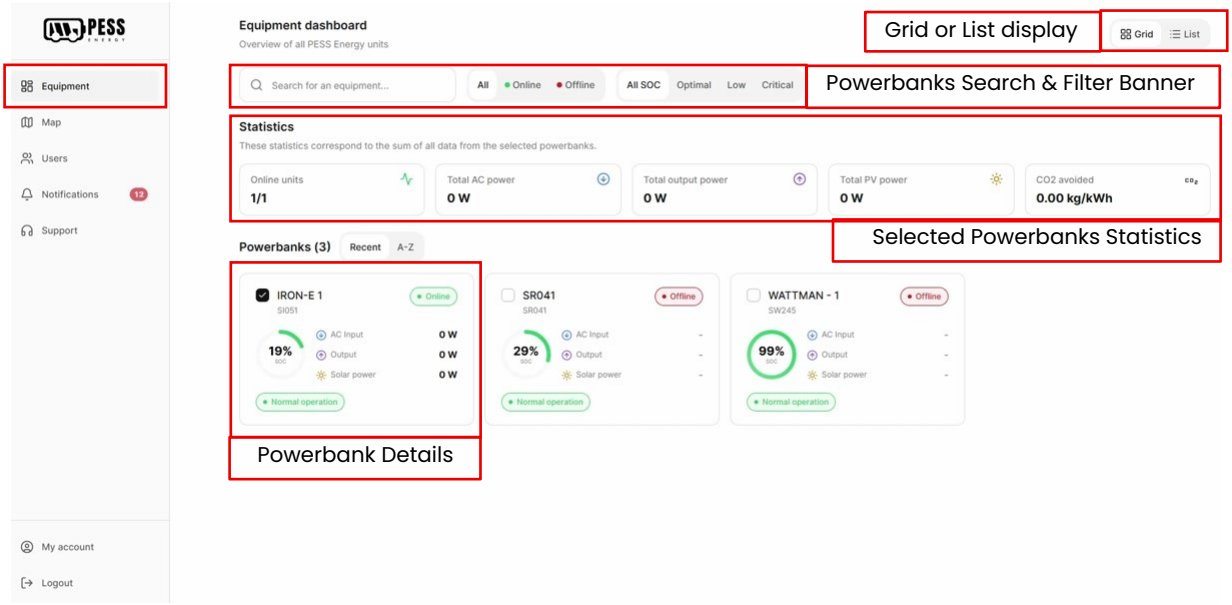






EQUIPMENT

The *Equipment* page lets you visualise all the power banks associated with your user account.

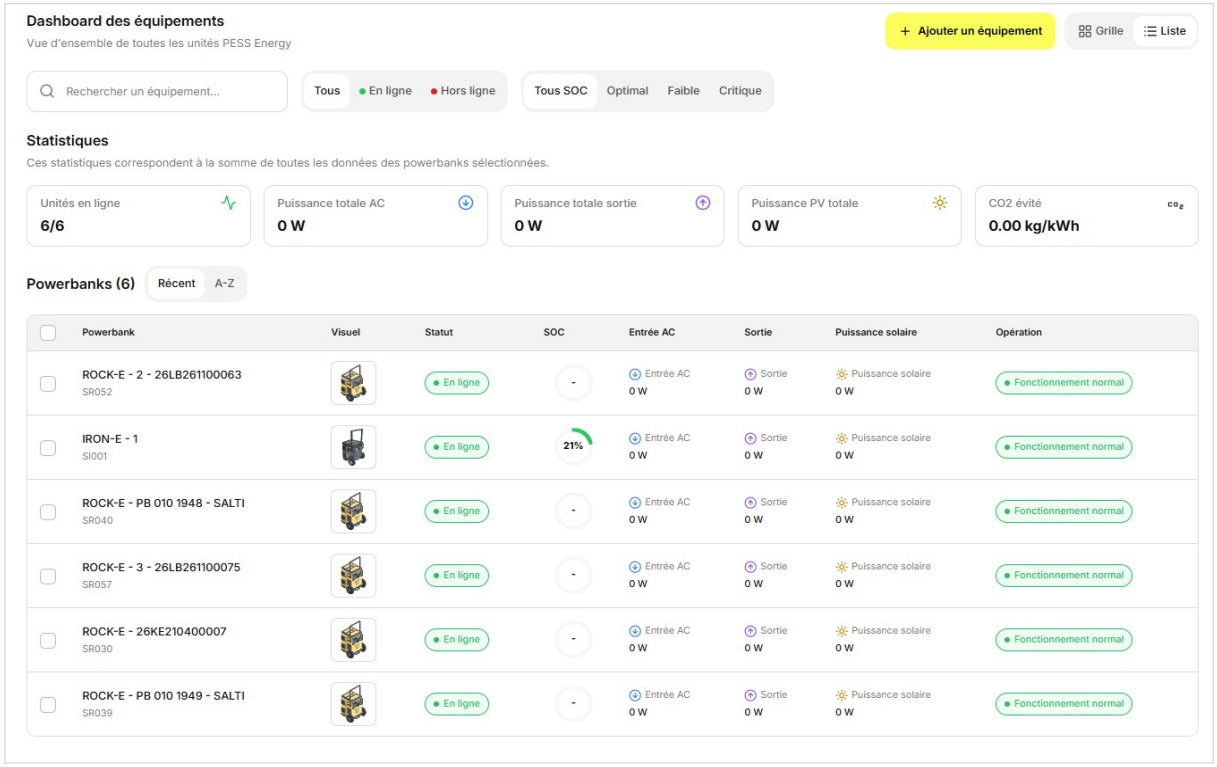


When you select one or more Powerbanks, the data displayed in the Statistics banner updates based on the number of devices selected.

Clicking on a Powerbank's name (e.g., *IRON-E 1*) takes you to that device's details page.

List view

The Grid / List button, at the top right of the page, lets you switch between the tile view and the list view. The list view shows all Powerbanks in a compact table (status, state of charge, input, output and solar power, operating status), handy for monitoring a large fleet at a glance.

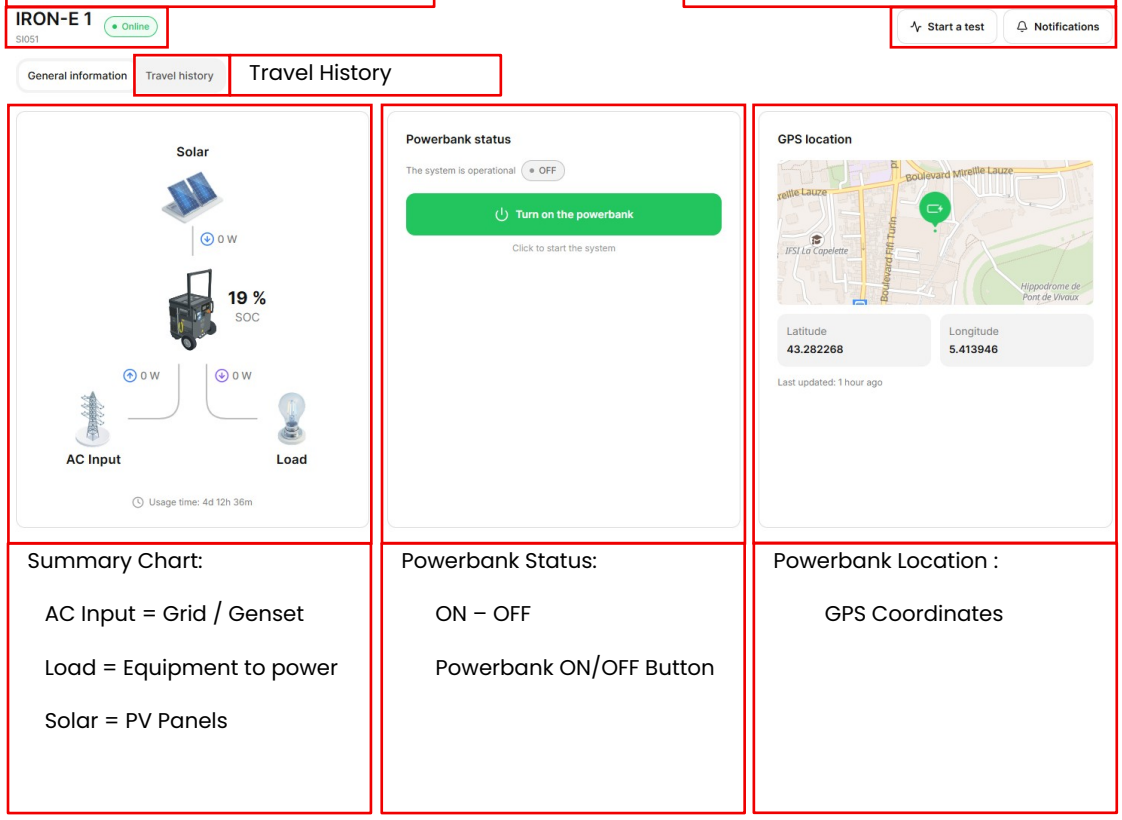


POWERBANK DETAILS

The Powerbank details page (e.g., *IRON-E 1*) allows you to visualise all the data sent by the Powerbank.

Name (editable) + Serial N° + Status

Communication Test + Notifications page



Travel History

Summary Chart:

AC Input = Grid / Genset

Load = Equipment to power

Solar = PV Panels

Powerbank Status:

ON – OFF

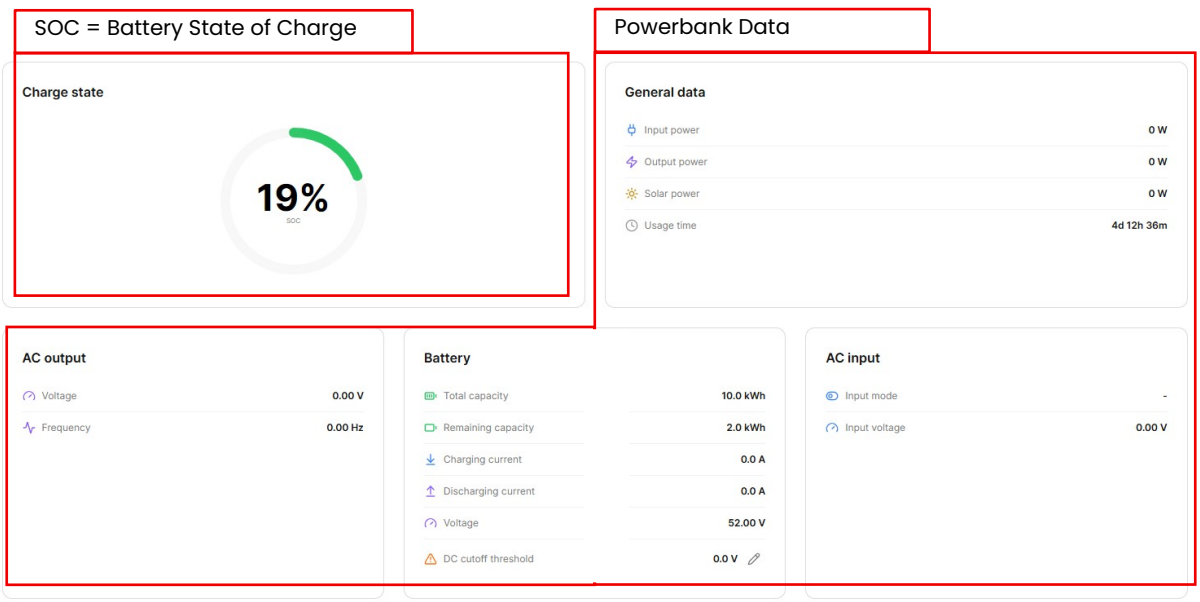
Powerbank ON/OFF Button

Powerbank Location :

GPS Coordinates

SOC = Battery State of Charge

Powerbank Data



The following table explains the data points displayed.

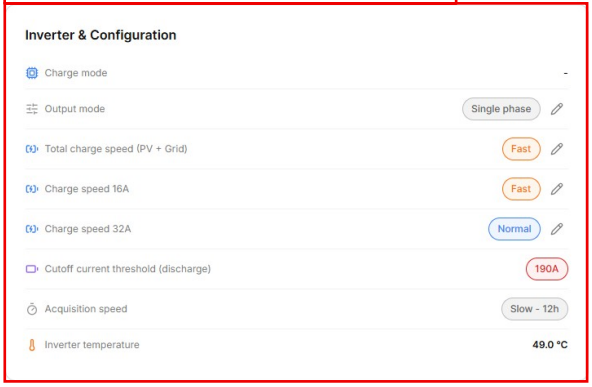
General Data	
Input Power	Instantaneous Input Power [W]
Output Power	Instantaneous Output Power [W]
Solar Power	Instantaneous PV Panels Power [W]
Usage Time	Time remaining [dd.hh.mm]

AC Output	
Voltage	Output voltage [V]
Frequency	Output Frequency [Hz]

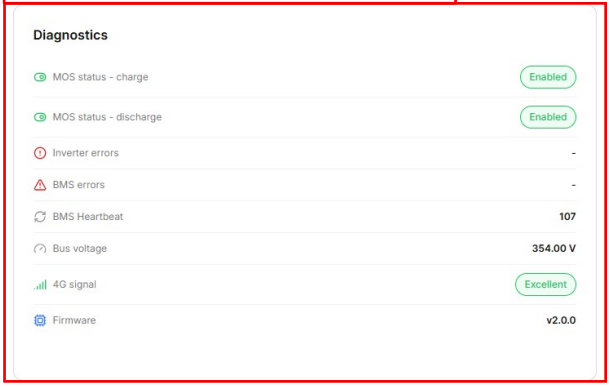
Battery	
Total Capacity	Powerbank Total Capacity [kWh]
Remaining Capacity	Powerbank Remaining Capacity [kWh]
Charging Current	DC Charging Current entering the Battery [A]
Discharging Current	DC Discharging Current out of the Battery [A]
Voltage	Battery DC Voltage [V]
DC Cutoff Threshold	Minimum Battery DC Voltage before Shutdown [V]

AC Input	
Input Mode	Charging Mode : [16A – 32A – Solar]
Input Voltage	Input (Grid/Genset) Voltage [V]

Powerbank Parameters (Controllable)



Diagnostics Data



The following table explains the various settings and information displayed.

Inverter & Configuration	
Charge Mode	Solar – Grid (Grid or Genset)
Output Mode	Single-phase – Parallel coupling
Total Charge Speed	General charging speed (PV + grid) Slow 1 kW – Normal 2 kW – Fast 3 kW
Charge Speed 16A	Charging Speed on 16A inlet sockets Slow 1 kW – Normal 2 kW – Fast 3 kW
Charge Speed 32A	Charging Speed on 32A inlet sockets Slow 1 kW – Normal 3 kW – Fast 4.5 kW
Cutoff Current Threshold (Discharge)	Maximum DC Discharge Current out of the Battery [A]
Acquisition speed	Frequency of data transmission, automatically adjusted to power bank usage.
Inverter Temperature	[°C]

Diagnostics	
MOS status – Charge	BMS Charging Switch Status
MOS status – Discharge	BMS Discharging Switch Status
Inverter errors	Invertor Error Code for Diagnostics
BMS errors	BMS Error Code for Diagnostics
BMS Heartbeat	Developer Data
Bus Voltage	Inverter DC Bus Voltage [V]
4G Signal	Quality of 4G Signal
Firmware	4G PCB Firmware version

Charging power settings

Charging parameters can be adjusted remotely via telemetry (Total Charge Speed, Charge Speed 16A and Charge Speed 32A settings). The table below shows the charging power corresponding to each setting for Rock-E, Iron-E, Gen-E and FlyWatt Powerbanks.

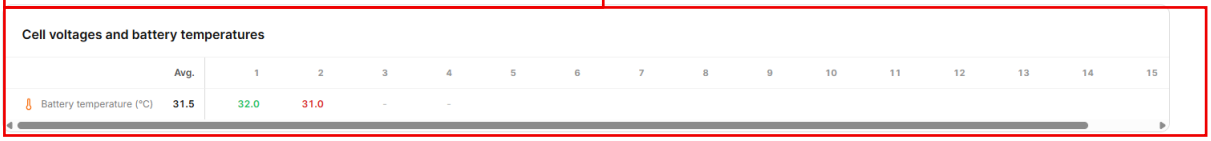
Charging power – Rock-E, Iron-E, Gen-E and FlyWatt			
Inlet socket	**Slow**	**Normal**	**Fast**
Total charging (PV + grid)	1000 W	2000 W	3000 W
16A charging	1000 W	2000 W	3000 W
32A charging	1000 W	3000 W	4500 W

⚠️ **Remote power on / off**

To control a Powerbank remotely, follow these steps in order:

1. **Switch the machine on physically:** set the Powerbank's ON/OFF switch to ON.
2. **Pause the machine via the web app:** switch it off from PESS App. The machine stops temporarily, but its switch stays on ON.
3. **Switch the machine back on via the web app:** restart it from PESS App whenever you need it.
4. **Switch the Powerbank off physically:** for a full shutdown (storage, transport, maintenance), set the ON/OFF switch to OFF.

Battery Cell voltages & temperatures with Min-Max





Instant. Output Power History

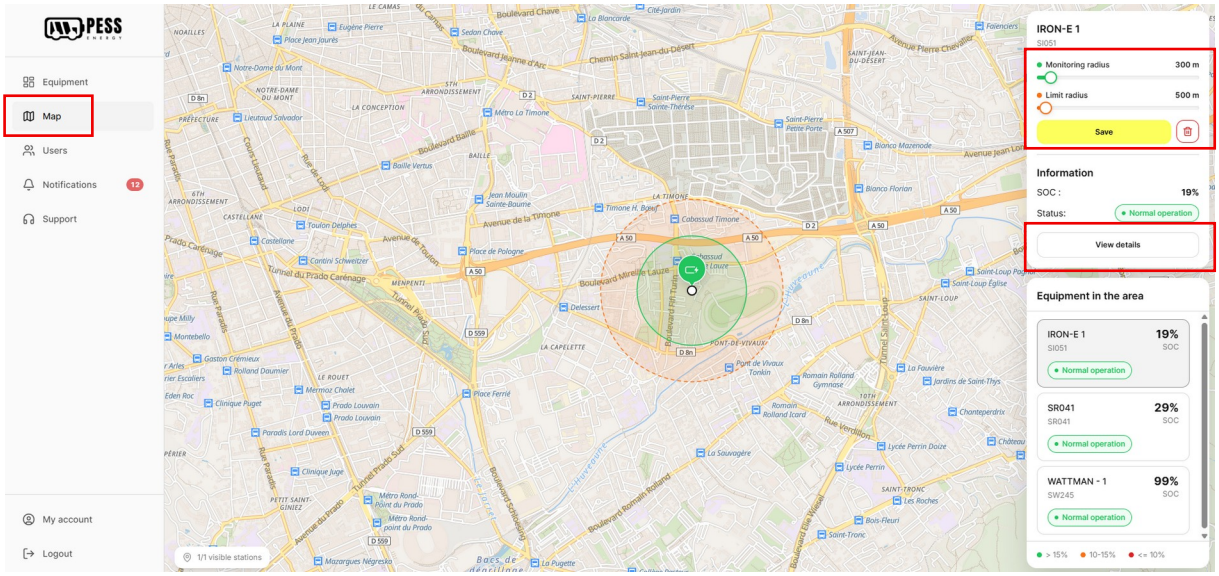
MAP

The *Map* page lets you locate Powerbanks using their GPS coordinates.

On the right side of the screen, the *Monitoring Radius* feature allows you to set a monitoring radius beyond which a notification is sent to the user.

The Limit Radius lets you set a limit radius beyond which an **alert** is sent to the user to warn them of any unwanted movement of the Powerbank.

The View Details button takes you to the Powerbank's details page.



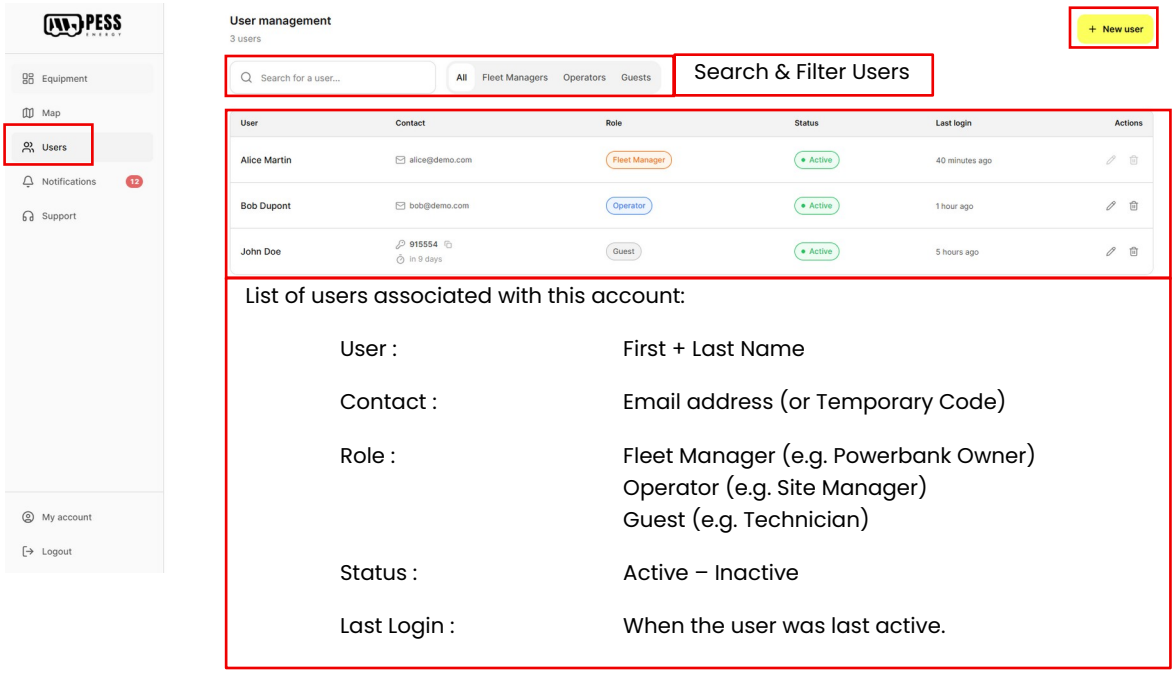
USERS

The *Users* page allows you to view all users associated with the account and the organization.

A Fleet Manager can view the other Fleet Managers in their organization, as well as all their Operators and Guests.

An Operator can view their organisation Fleet Managers, as well as all their Operators and Guests.

Guests do not have access to the Users page.



List of users associated with this account:

User :	First + Last Name
Contact :	Email address (or Temporary Code)
Role :	Fleet Manager (e.g. Powerbank Owner) Operator (e.g. Site Manager) Guest (e.g. Technician)
Status :	Active – Inactive
Last Login :	When the user was last active.

ROLES AND PERMISSIONS

The table below summarises the rights of each profile in the current (BETA) version of PESS App.

Action	Admin PESS	Fleet Manager	Operator	Guest
View specifications	✓	✓	✓	✓
Switch a Powerbank on / off	✓	✓	✓	–
Run self-tests	✓	✓	✓	–
Geolocation	✓	✓	✓	–
Geofencing (monitoring zones)	✓	✓	✓	–
Create a user	All profiles	All except Admin PESS	Guest only	–
Edit settings	✓	✓	–	–
Rename a Powerbank	✓	✓	–	–
Delete a Powerbank	✓	–	–	–
Delete a user	✓	–	–	–
Manage organisations	✓	–	–	–

The Admin PESS profile is reserved for PESS Energy staff.

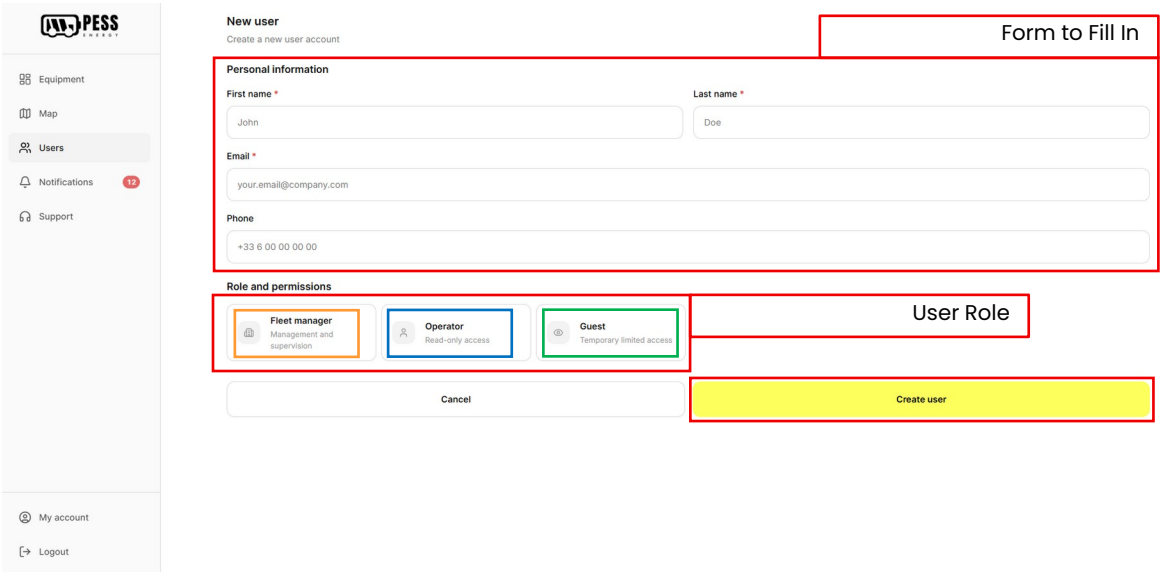
ADD A NEW USER

The *New User* page allows you to create a new user account with the following permissions:

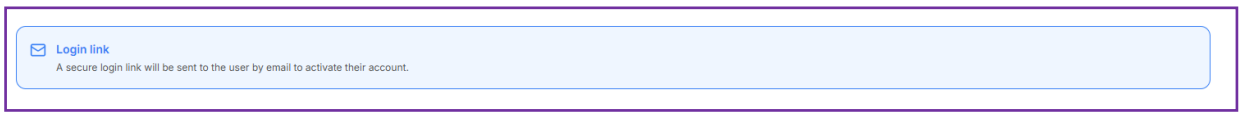
A Fleet Manager can create other Fleet Managers, Operators, and Guests.

An Operator can only create a Guest user.

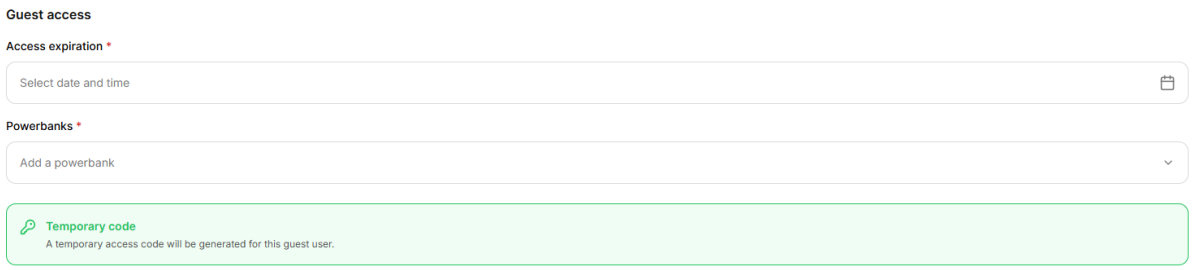
A Guest cannot create users.



If a Fleet Manager or Operator account is created, a secure login link is sent to the future user's email address.



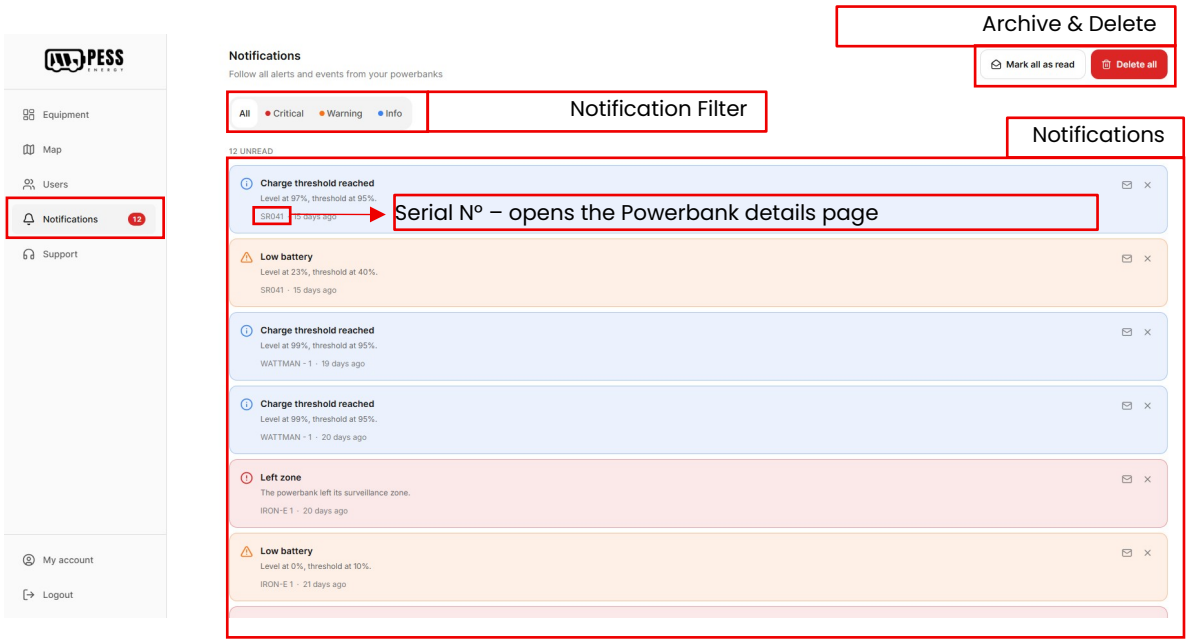
If a Guest account is created, you must specify an *Access Expiration Date* beyond which the user will no longer be able to log in to the App. In addition, you must assign the Powerbanks to which the user will have access.



NOTIFICATIONS

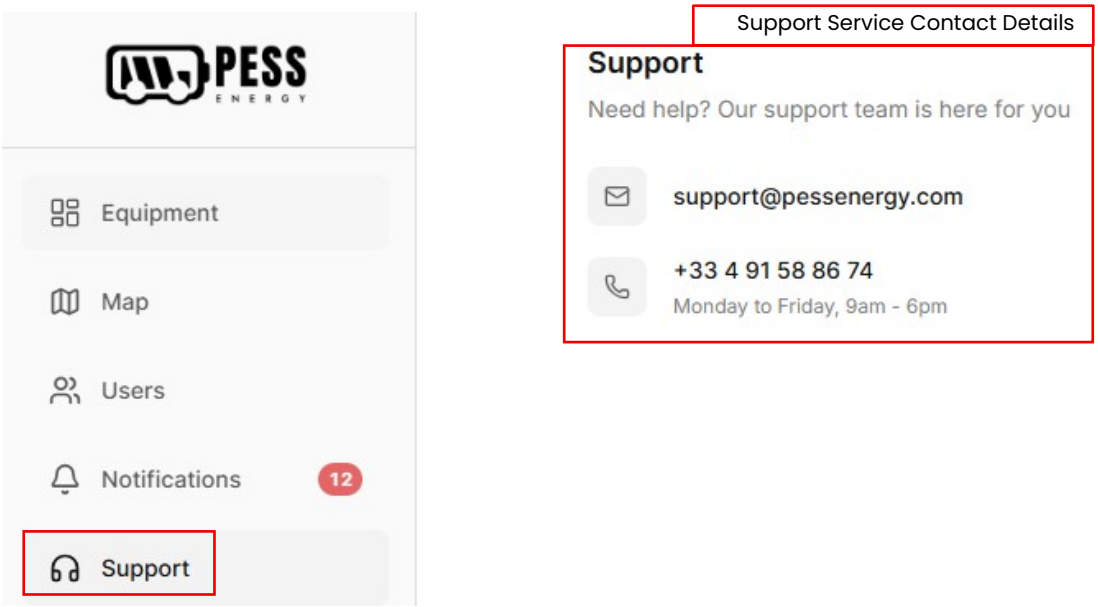
The *Notifications* page allows users to view the various notifications and alerts sent by the Powerbank.

You can access the Powerbank's details page by clicking on the notification's serial number.



SUPPORT

The Support page displays the contact information for PESS Energy Support.



MY ACCOUNT

The *My Account* page lets you check your information, change your password, and delete your account.

