SolaX Power

Installation Pack

www.solaxpower.com

COMMON FAULTS QUESTIONS

X1-AC+X1-HYBRID

METER CONNECTION

At the Eastron meter always use terminals 5+6 which represent A+B, on the X1-AC this then terminates onto pins 7+8 on an RJ45 and **MUST** go into the meter port. On the hybrid this needs to be terminated to pins 4+5 of the RJ45. On the newer model hybrids there is a green terminal block at the inverter labelled **METER** and shows A+B terminals which correspond to 5+6 at the meter. Only a 2-core comms cable is needed, and **the maximum length between meter and inverter is 100 metres.** Always make sure meter is set to address 001. The meter MUST be located at the first point after the customers UTILITY METER to guarantee import and export figures are correct, and the batteries will charge and discharge accordingly.

BMU SETTINGS AND TRIPLE POWER BATTERY

Ensure the BMU is set to the correct DIP switch setting on the dial. 0 for 1 battery, 1 for 2 batteries, 2 for 3 batteries and 3 for four batteries. Make sure the IP55 rated grommets on the Triple power battery and BMU are tightened using the tool provided. If not, this can cause intermittent dropouts. At the X1-AC or the X1-hybrid the BMS cable **MUST** be plugged into the **BMS port**, at the other end this should be plugged into the **CAN** port of the BMU.

REMEMBER TO PLUG THE SHORT CIRCUIT PLUG IN ON THE LAST BATTERY

COMMISSIONING – SOLAX SETTINGS PASSWORD IS 2014

The commissioning process is very simple, please follow the below steps:

- Turn on DC (hybrid only), AC and battery using the isolators. Please note the battery push switch and breaker are on the TRIPLE POWER BMU, on the removable plate, located on the right.
- Once the inverter is on the inverter will do a 30 second countdown.
- Go to Date and time settings and make sure this is correct.
- Make sure safety setting is G98/99. (Ireland users will be EN50438).
- Access the charger settings and set the minimum capacity of the battery to 10%.
- Ensure the BMS is connected in Status - Charger.

COMMON FAULTS

METER FAULT- This means the meter and the inverter are not communicating. Most common cause is the wrong polarity or pin connections between X1-AC/HYBRID and the Eastron Meter. Ensure the comms cable has no joins and is one whole length, and make sure the meter is set to address 001. Meter password is 1000.

BMS INTERNAL ERROR- This is a result of the DIP switch being set incorrectly or the BMS cable being loose in the CAN port of the BMU. Failing this call SolaX and the BMU may need replacing.

BATTERIES CHARGING FROM GRID- If the batteries are charging from the grid, this means that the work mode setting is set to Force time use and is programmed to charge from the grid. If this is set to self-use and the batteries are still charging from grid, this means the polarity on the line cable will be incorrect at the Eastron meter.

BATTERIES NOT CHARGING/DISCHARGING CORRECTLY- This will be down to the location of the Eastron meter. Ensure that the meter is at the origin of the supply rather than a supply to a garage board/separate board etc, this will mean that the batteries will only discharge from the load seen on that specific board. Also, the meter must be located in a position that it will see the export otherwise the battery will not charge.

BMS RELAY FAULT- Reset the BMU, if fault still occurs then the BMU needs replacing.

EPS MODE- EPS mode means there is a loss of AC power and the inverter has gone into Emergency power mode meaning a changeover switch can be connected.

BMS VERSION UNMATCH- When installing multiple batteries and this fault comes up, this means the batteries will be running on different software versions. Upgrade can be done via USB or installers on the training course will know how to update. Contact SolaX for more information.

OTHER DEVICE FAULT- Other device fault represents an issue with other equipment on the circuit. Usually a loose earth or faulty isolator would cause this. Check all these points and reset the X1-AC/HYBRID and the fault should clear.

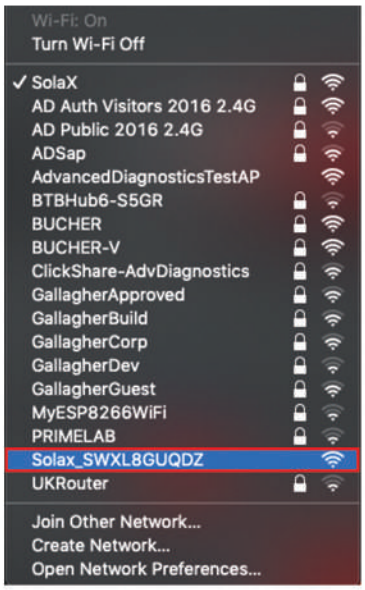
ISOLATION FAULT- This fault will only appear when the inverter is picking up leakage current from the DC side. Test all strings to earth and the result should be 0V, if not check for loose connections/plugs or potential water or dampness in DC connections.

TEMPERATURE FAULT- Please remove cover of the inverter and check the temperature plug within inverter, once this has been checked reset the SolaX unit and the fault will clear.

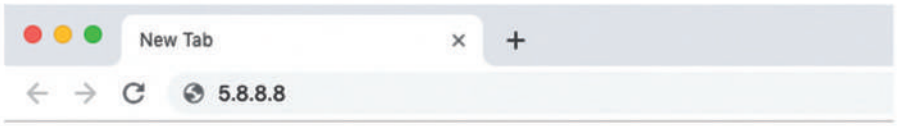
GRID LOST FAULT- No grid voltage recorded at X1-AC/HYBRID.

WAITING- X1-AC/HYBRID is seeing AC voltage but is waiting for a DC voltage off panels or battery.

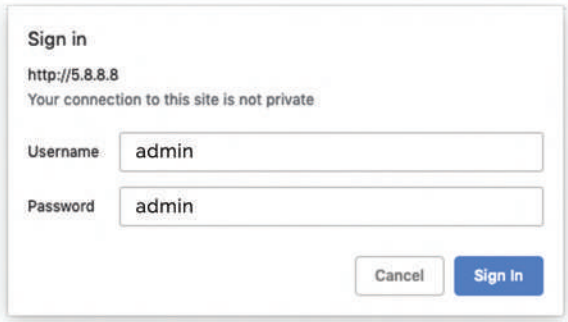
SolaX Wi-Fi Connection Instructions



1. Open up the list of available Wi-Fi networks on any wireless device and connect directly to the SSID **'SolaX_##########'**. Please note, this number is your unique Wi-Fi SN. It is needed for creating an account on www.solaxcloud.com.

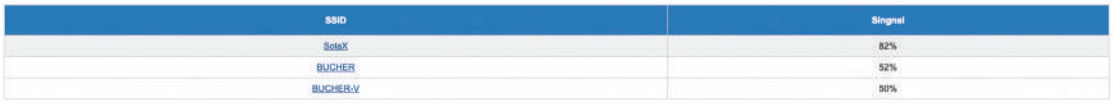


2. Once connected to the SolaX network, open up any web browser and enter the IP address **5.8.8.8** into the browsers address bar and press enter.



3. You will then be prompted for a username and password. This is **admin, admin**, both in lowercase. Once entered, press sign in.

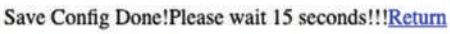
4. This is the screen you will see when signed in, select **'Find Ap'**



5. A list of local networks will be be brought up, select the network you use from the list by clicking on the networks name.

SolaX Wi-Fi Connection Instructions

6. Now the SSID box will become populated, in the 'Key' box underneath you will need to enter your wireless password used to connect to your network and click on 'save'. Please note, this is case sensitive and will not alert you to a wrong password.



7. You will see this message once saved. The connection between your inverter and router has now been established.

Now connect back to your home network and visit **wwww.solaxcloud.com** to create an account. The SolaX Cloud is also available as an app.

Download on the App Store

GET IT ON Google Play

Welcome to the SolaX Cloud

a comprehensive guide to using the SolaX monitoring platform

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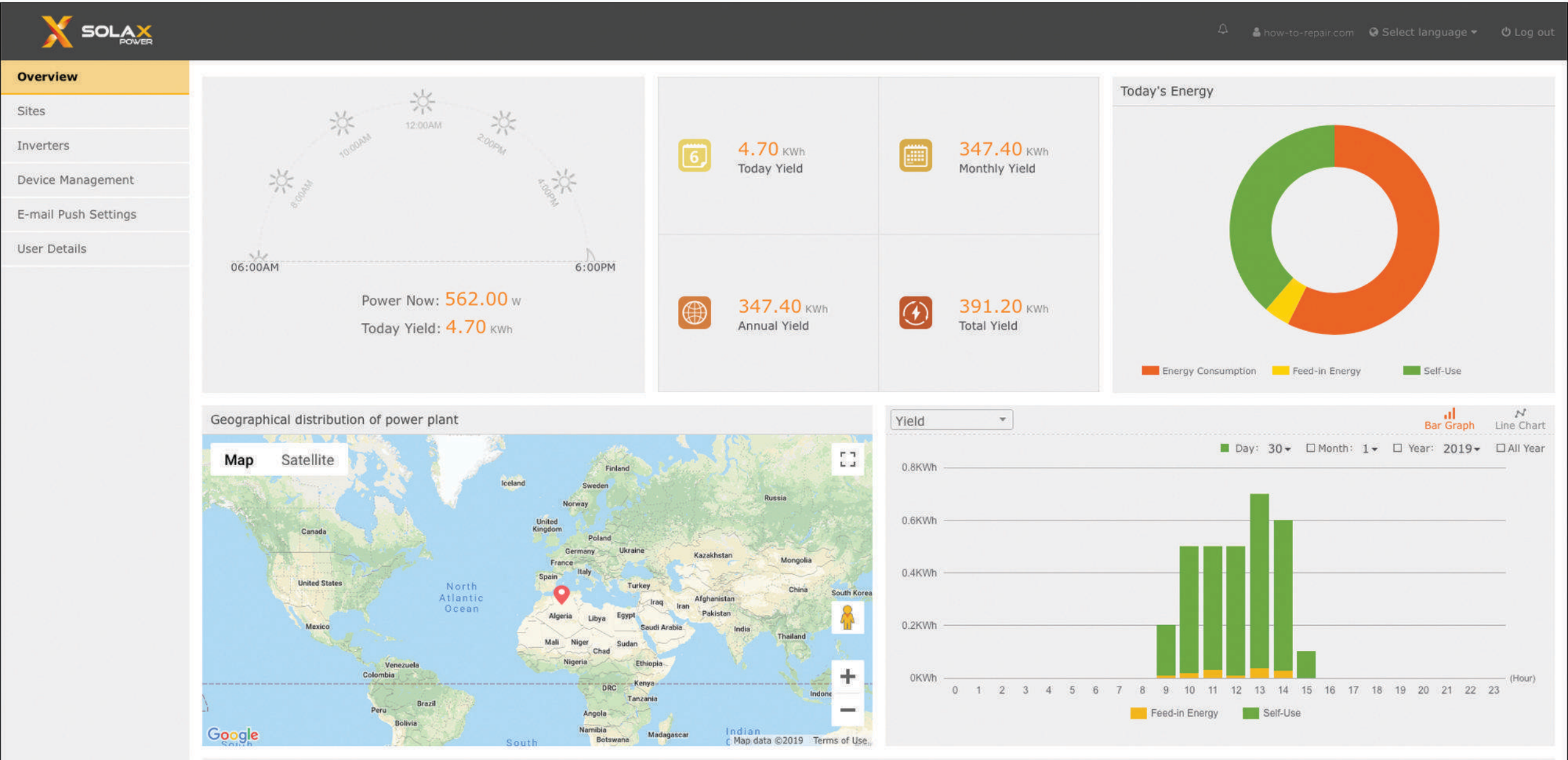
GET IT ON Google Play

www.solaxcloud.com

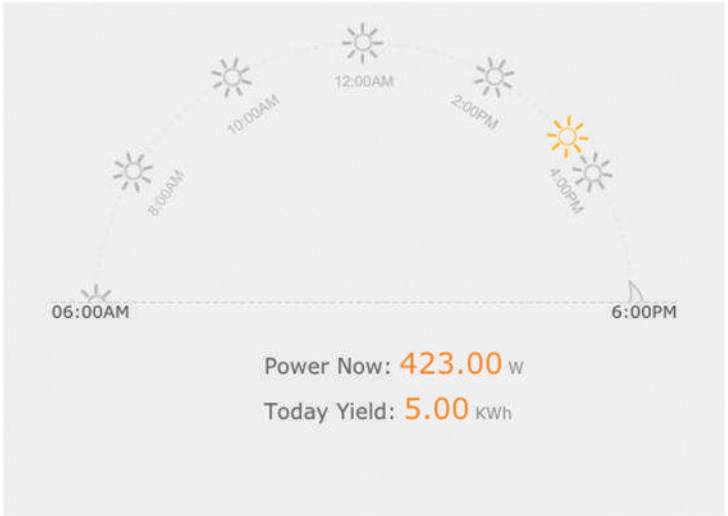
The first screen you see when you log-in

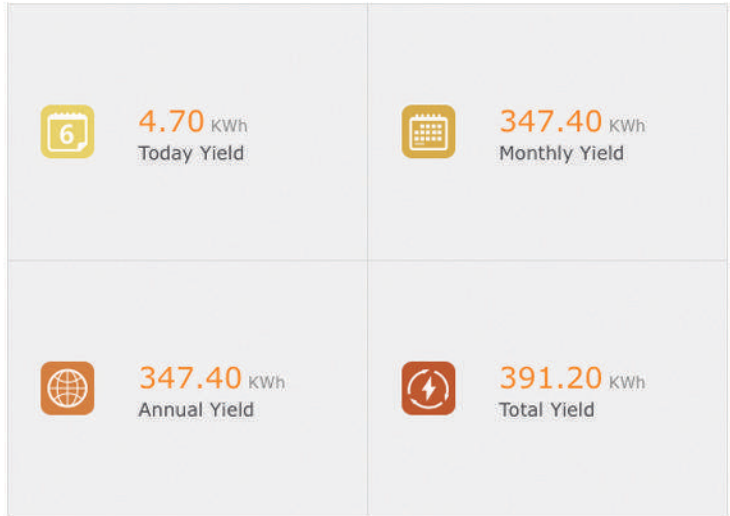
Each area will be broken down throughout the guide

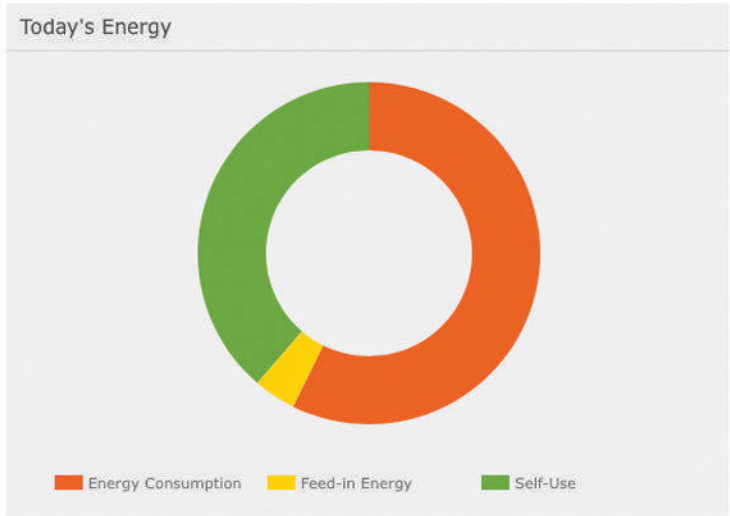


Breaking down the first graphs

Understanding the homescreen







Graph Number One

This graph is displaying the local time from 6AM-6PM, marked by a small yellow sun as you can see in the above screenshot.

Power Now: This is what your solar panels are generating at the current time (W).

Today Yield: This is the total energy generated for the current day (kWh)

Graph Number Two

This graph displays the generation for the day/month/year and total.

Monthly Yield: This is what your solar panels have generated in the current month.

Annual Yield: This is the total energy generated for the current year.

Total Yield: This is the total energy generated sice the SolaX Cloud was set-up.

Graph Number Three

This is the energy that has been pulled from the grid to satisfy demand.

This is energy exported to the grid

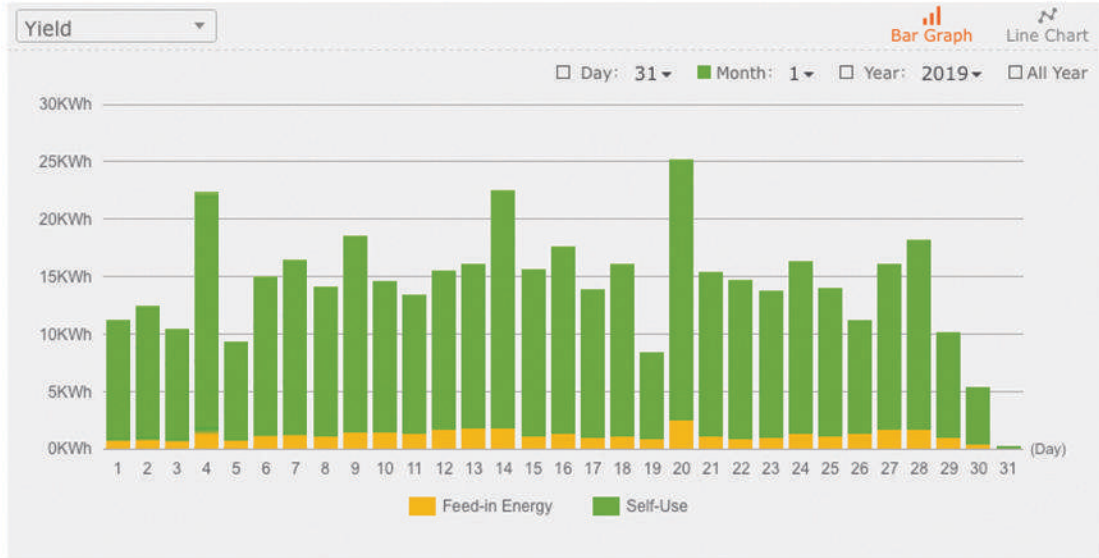
This is the energy used that your solar panels have produced.

Breaking down the second graphs

Understanding the homescreen

The map

This is quite self explanatory, when creating a site you must mark the location on the map. This map displays the marked location.

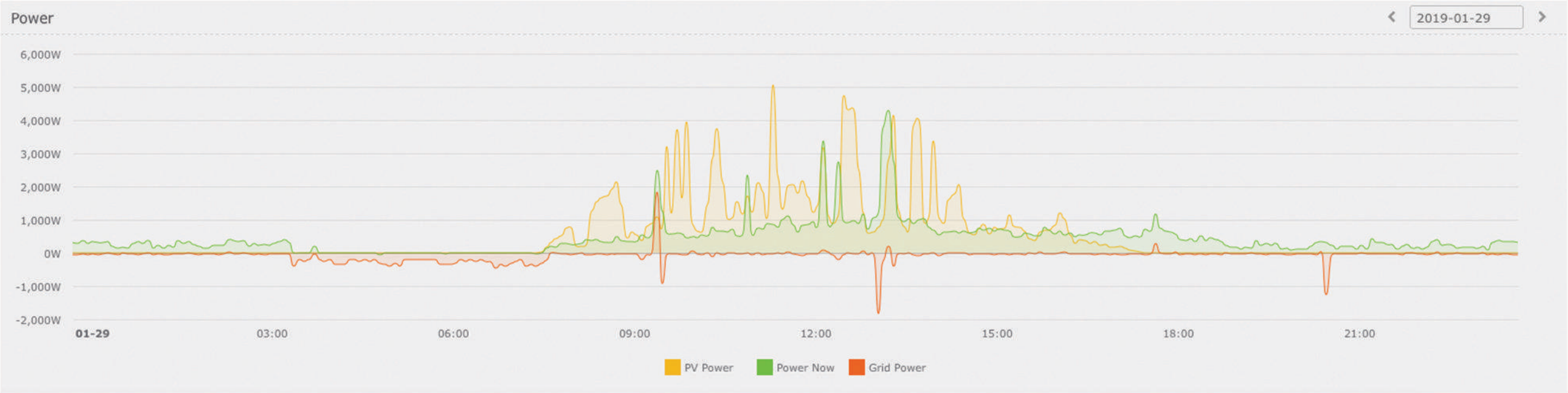


The bar graph

This bar graph is displaying what we saw on the previous page, feed-in energy against self-use energy generated from the panels for the month, day or year. You can see that on day **20**, the user generated **25kWh**, used **22.5kWh** and exported **2.5kWh** to the grid.

The line graph

Understanding the homescreen



PV Power

This is the power that your solar panels are currently generating. You can see from the graph above that this data is live throughout the day, with power going up and down from cloud cover etc.

Power Now

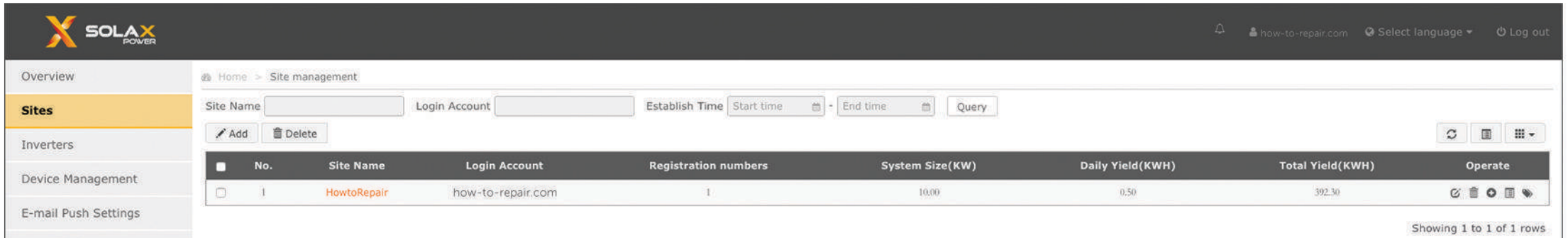
This is the output power, a combination of solar power and battery power (if you have a battery storage system). When the PV Power exceeds the Power Now, this is when your batteries will be charging, when Power Now exceeds PV Power, they will be discharging.

Grid Power

This represents the energy being taken and given to the grid. When this is below the line energy is being imported from the grid, when it is above the line energy is being exported to the grid.

Sites

Understanding the sites area

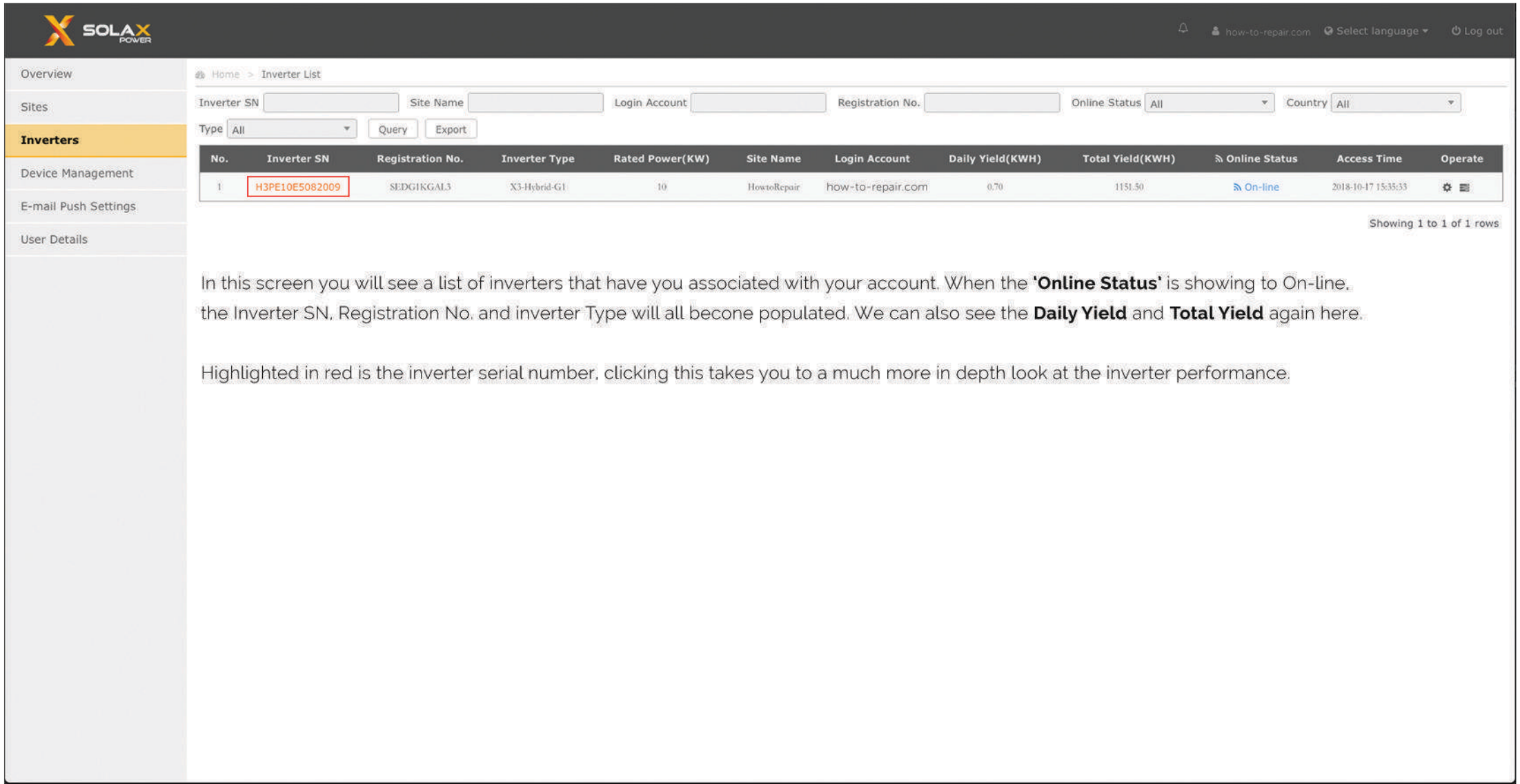


The sites page displays a list of created sites under the account. If there is more than one inverter associated with the account, they can be added using the **'Add'** button above. This will bring you to the site creation form that you used before.

From this page you can also see information about your system such as the **System Size, Daily Yield** and also the **Total Yield** of that system.

Inverters

Understanding the inverters area

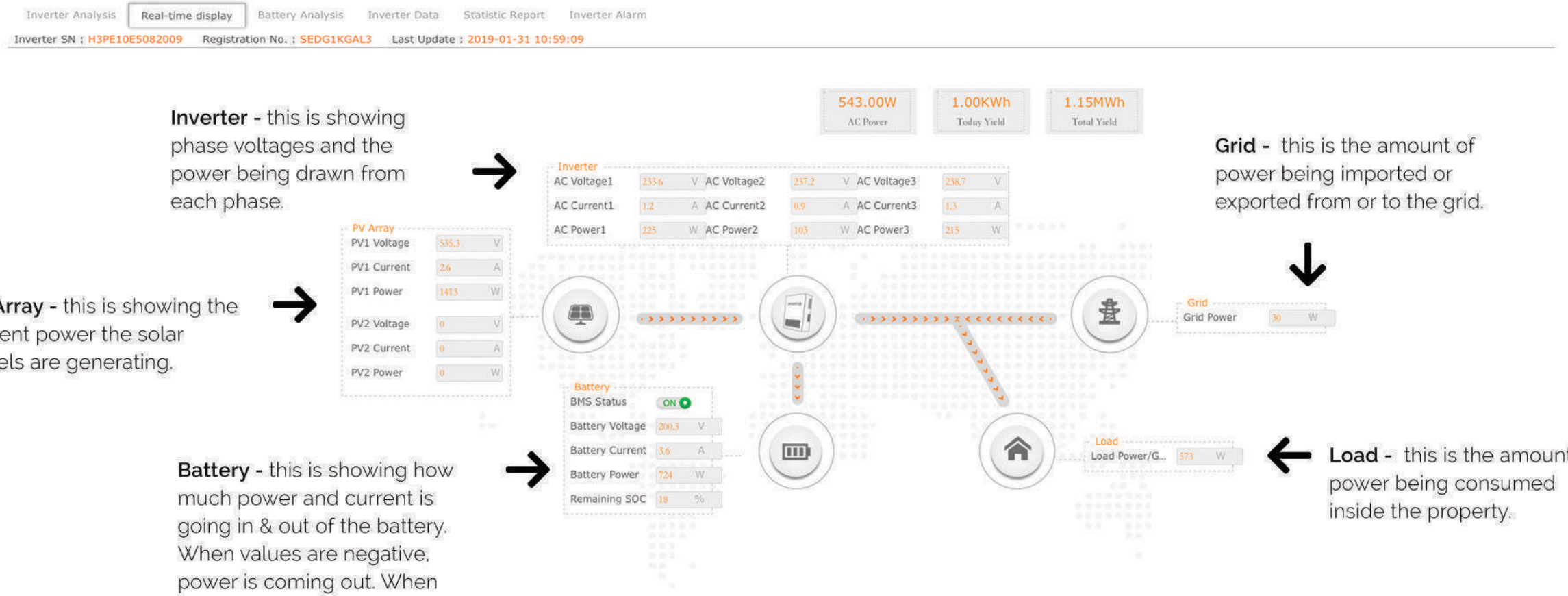


In this screen you will see a list of inverters that have you associated with your account. When the **'Online Status'** is showing to On-line, the Inverter SN, Registration No. and inverter Type will all become populated. We can also see the **Daily Yield** and **Total Yield** again here.

Highlighted in red is the inverter serial number, clicking this takes you to a much more in depth look at the inverter performance.

Real-time display

Understanding the inverters area



Inverter - this is showing phase voltages and the power being drawn from each phase.

PV Array - this is showing the current power the solar panels are generating.

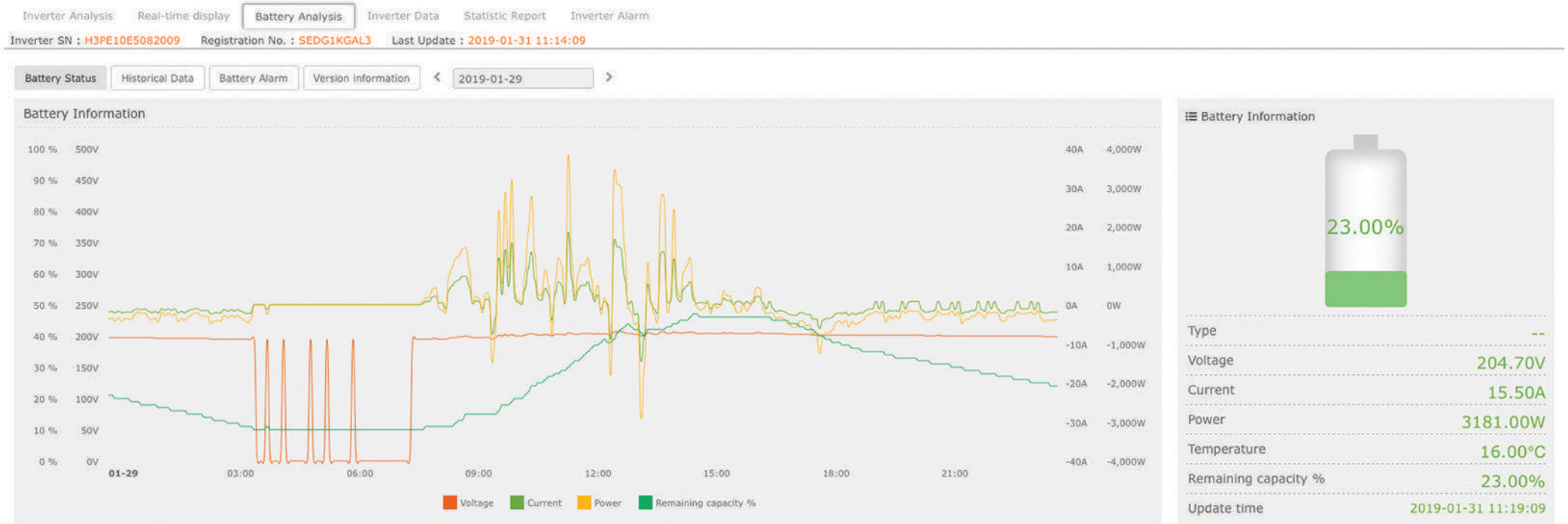
Battery - this is showing how much power and current is going in & out of the battery. When values are negative, power is coming out. When the value is positive, power is going into the battery.

Grid - this is the amount of power being imported or exported from or to the grid.

Load - this is the amount of power being consumed inside the property.

Battery Analysis

Understanding the inverters area



Voltage

The voltage is displaying the battery voltage throughout the day. When the voltage is up the battery is charging, when it is down it is discharging.

Current

The current is displaying the battery current throughout the day. When the current is up the battery is charging, when it is down it is discharging.

Power

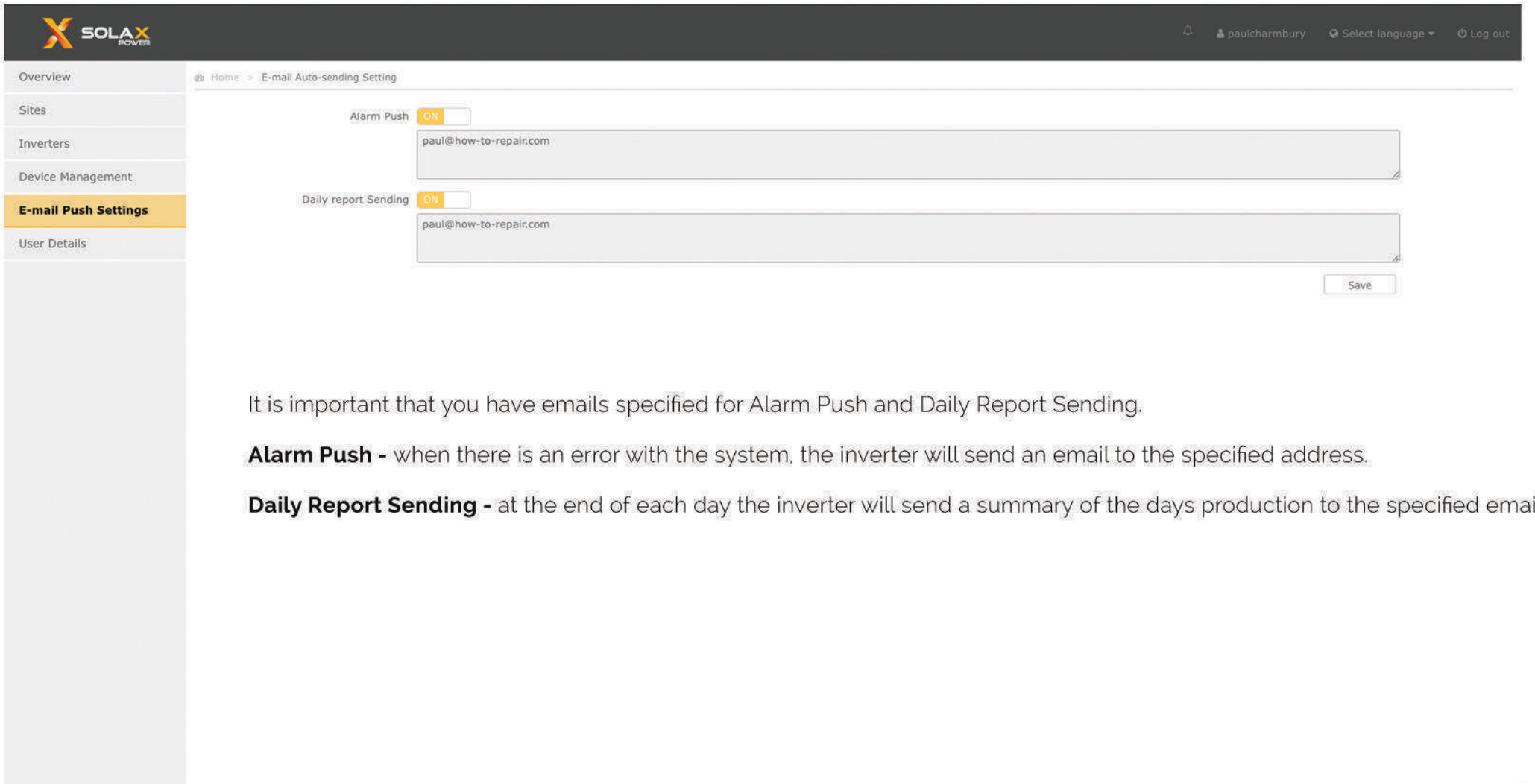
The power is displaying the battery power throughout the day. When the power is up the battery is charging, when it is down it is discharging.

Remaining capacity

This is displaying the amount of charge left in the battery at the given time.

E-mail Push Settings

Important push emails



It is important that you have emails specified for Alarm Push and Daily Report Sending.

Alarm Push - when there is an error with the system, the inverter will send an email to the specified address.

Daily Report Sending - at the end of each day the inverter will send a summary of the days production to the specified email address.