

Energenic

# Big Brother Platform Usage Manual

September 2019

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## Purpose

This manual serves as a reference guide to the efficient usage of the Big Brother Platform. This manual is a useful aid to assist a user of the platform - if needed.

## General (Important)

### Detailed data

The values depicted on Big Brother are calculated, collected and some are averaged. The reason for this is to improve the performance and responsiveness of the platform, this being said, the exact value of every second/minute may not be available.

To view a specific data (on a graph which shows multiple values):

- *Click* the value you want displayed on its own (on the **legend** of the graph)
- To display a set of selected values (hold *CTRL* + *click* the values on the legend) this can also deselect values if not wanted.

### Zooming and Resetting

In order to reset the values and graphs to their current status, set the time-window to 'Today'.

The time-window can be changed by selecting a '**Quick Range**', a '**Custom Range**', or by **selecting a timespan** on a graph.

### Visual Guide



- |  |   |   |
|--|---|---|
| <b>1) History Interval Selector</b>    | - | Specifies the history interval                                  |
| <b>2) History View Window Selector</b> | - | Specifies the history time-window                               |
| <b>3) Star Dashboard</b>               | - | Add dashboard to Starred Dashboards                             |
| <b>4) Cycle View Mode</b>              | - | Switch between <i>Normal</i> / <i>Fullscreen</i> / <i>Kiosk</i> |
| <b>5) Time-window selector</b>         | - | Select ' <i>Today</i> ' to set graphs to standard view          |
| <b>6) Time-range zoom out</b>          | - | Increase shown data on applicable graphs                        |
| <b>7) Refresh Dashboard data</b>       | - | Check if new data is available manually                         |
| <b>8) Select Refresh Interval</b>      | - | Set automatic data refresh interval                             |

## Overview Tab

### Last Solar Charger Update

This indicates when the data from the device/platform was last updated.

### Last VE Bus Update

This indicates when the data from the device/platform was last updated.

### Last Battery Monitor Update

This indicates when the data from the device/platform was last updated.

### Consumption (Pie chart)

Shows the percentages and current of the 'zones' consumption over the **selected days** of the time-window. If the time-window is changed, the graph will show the current consumed during that period. However the time-window needs to be in days, the values will only be represented accurately if the time-window is a day interval i.e last 7 days, last 2 days.

### Total Consumption (Gauge)

Shows how many kWh have been consumed currently, if the time-window is changed this will show how much was consumed over the **selected days** of the time-window. If the time-window is changed, the graph will show the current consumed during that period. However the time-window needs to be in days, the values will only be represented accurately if the time-window is a day interval i.e last 7 days, last 2 days.

### Total Yield (Gauge)

Shows the current yield, if the time-window is changed this will show the yield over the **selected days** of the time-window. However the time-window needs to be in days, the values will only be represented accurately if the time-window is a day interval i.e last 7 days, last 2 days.

### Total Solar Yield (Gauge)

This indicates the total solar yield of the selected time-window.

## Yield (Pie chart)

Shows the percentages and current of the yield over the **selected days** of the time-window. If the time-window is changed, the graph will show the yield during that period. However the time-window needs to be in days, the values will only be represented accurately if the time-window is a day interval i.e last 7 days, last 2 days.

## Mean Battery Temperature

This shows the mean battery temperature of the selected time-window.

## Mean Battery State of Charge

This shows the mean battery SOC of the selected time-window.

## Alerts

Alerts are displayed when:

- An irregularity is found
- A pre-set trigger is reached by a certain value/value pattern

Alerts consist of a:

- Name - Which describes the source (i.e Daily Energy, Battery SOC etc.)
- Message - Gives additional information (if applicable)
- Date - The date and time of the alerts initial activation (when the alert)
- Relative Time - Elapsed time of alert being displayed
- Status - **PROBLEM** alerts are the only alerts which will be displayed here

## Battery Monitor State

This shows the latest battery monitoring state of the current battery state, this value does not change based on the time-window, it is the current value.

## VE Bus System State

This shows the latest VE Bus System state, this value does not change based on the time-window, it is the current value.

## Solar Charger Charge State

This shows which charge state of the solar charger, this value does not change based on the time-window, it is the current value.

## Solar Charger MPPT State

This shows which MPPT state of the solar charger, this value does not change based on the time-window, it is the current value.

## Hourly Overview (graph)

Displays the hourly Total Consumption and hourly Total Yield of the selected time-window.

## Total Consumption (graph)

Displays the Total Consumption within the selected time-window.

## Total Yield (graph)

Displays the Total Yield within the selected time-window.

## Weekly Total Consumption (graph)

This shows the **current weekly consumption** if the time-window is changed, this graph will not show that time-windows values. To inspect the weekly consumption, reset the values (by selecting Today), once this is done, the weekly consumption will be depicted accurately.

## Weekly Total Yield (graph)

This shows the **current weekly yield** if the time-window is changed, this graph will not show that time-windows values. To inspect the weekly yield, reset the values (by selecting Today), once this is done, the weekly yield will be depicted accurately.

## Consumption Tab

### Daily Consumption Overview

This shows the **previous 30 days consumption from today** if the time-window is changed, this graph will not show that time-windows values. Reset the values (by selecting Today), once this is done, the consumption will be depicted accurately.



## Hourly Consumption Overview

This shows the hourly consumption of a selected time-window.

## Total Consumption

Displays the Total Consumption within the selected time-window.

## Total Consumption Live

Displays the Total Live Consumption within the selected time-window. If the time-window is in the past, it will simply display an overview of that time-windows live data.

## PV to Consumers

Displays the PV to Consumers within the selected time-window.

## PV to Consumers Live

Displays the PV to Consumers within the selected time-window. If the time-window is in the past, it will simply display an overview of that time-windows live data.

## Battery to Consumers

Displays the Battery to Consumers within the selected time-window.

## Battery to Consumers Live

Displays the Live Battery to Consumers within the selected time-window. If the time-window is in the past, it will simply display an overview of that time-windows live data.

## Yield - Overview Tab

### Daily Yield Overview

This graph shows a daily overview of the yield, any time-window less than a day will cause this graph to provide less accurate depictions, thus if a higher detail is required, use the hourly overview.

### Hourly Yield Overview

This shows the hourly yield of a selected time-window in hour intervals.

## **Yield - PV Tab**

### **Daily PV Yield Overview**

This graph shows a daily overview of the PV yield, any time-window less than a day will cause this graph to provide less accurate depictions, thus if a higher detail is required, use the hourly overview.

### **Hourly PV Yield Overview**

This shows the hourly PV yield of a selected time-window in hour intervals.

### **Total PV Yield**

This shows the total PV yield of a selected time-window in hour intervals.

### **Total PV Yield Live**

Displays the Live PV Yield within the selected time-window. If the time-window is in the past, it will simply display an overview of that time-windows live data.

### **PV to Battery**

This shows the PV to Battery of a selected time-window in hour intervals.

### **PV to Battery Live**

Displays the Live PV to Battery within the selected time-window. If the time-window is in the past, it will simply display an overview of that time-windows live data.

### **PV to Consumers**

This shows the PV to Consumers of a selected time-window in hour intervals.

### **PV to Consumers Live**

Displays the Live PV to Consumers within the selected time-window. If the time-window is in the past, it will simply display an overview of that time-windows live data.

## PV to Grid

This shows the PV to Grid of a selected time-window in hour intervals.

## PV to Grid Live

Displays the Live PV to Grid within the selected time-window. If the time-window is in the past, it will simply display an overview of that time-windows live data.

## Battery Monitor Tab

### Last Battery Monitor Update

Elapsed time since latest Monitoring data was sent from the monitoring device/platform. This value **does not change** if the time-window is changed, it is the latest value.

### Battery Monitor State

The State of Battery Monitoring currently used. This value **does not change** if the time-window is changed, it is the latest value.

### Battery State of Charge

This graph shows the last values in the time-window of the Battery SOC.

### Battery Temperature

This graph shows the last values in the time-window of the Battery Temperature.

### Daily Battery State of Charge Overview

This graph shows a daily overview of the Battery State of Charge, any time-window less than a day will cause this graph to provide less accurate depictions, thus if a higher detail is required, use the hourly overview.

### Daily Battery Temperature Overview

This graph shows a daily overview of the Battery Temperature, any time-window less than a day will cause this graph to provide less accurate depictions, thus if a higher detail is required, use the hourly overview.

## Hourly Battery State of Charge Overview

This shows the Battery SOC of a selected time-window in hour intervals.

## Hourly Battery Temperature Overview

This shows the Battery Temperature of a selected time-window in hour intervals.

## Battery State of Charge

This shows the Battery State of Charge of a selected time-window.

## Battery Temperature

This shows the Battery Temperature of a selected time-window.

## Battery Voltage

This shows the Battery Voltage of a selected time-window.

## Battery Current

This shows the Battery Current of a selected time-window.

## VE Bus System Tab

### Last VE Bus System Update

Elapsed time since latest VE Bus System data was sent from the monitoring device/platform. This value **does not change** if the time-window is changed, it is the latest value.

### VE Bus System State

The VE Bus System State currently used. This value **does not change** if the time-window is changed, it is the latest value.

## **Input Power**

This shows the Input Power of a selected time-window.

## **Output Power**

This shows the Input Power of a selected time-window.

## **Input Voltage**

This shows the Input Voltage of a selected time-window.

## **Output Voltage**

This shows the Output Voltage of a selected time-window.

## **Input Current**

This shows the Input Current of a selected time-window.

## **Output Current**

This shows the Output Current of a selected time-window.

## Solar Charger Tab

### Last Solar Charger Update

Elapsed time since latest Solar Charger data was sent from the monitoring device/platform. This value **does not change** if the time-window is changed, it is the latest value.

### Daily Yield

This is the yield (power) going from this solar charger to the consumers throughout the selected time-windows last day.

### Solar Charger Charge State

This shows which charge state the solar charger is of the selected time-window.

### Solar Charger MPPT State

This shows which MPPT state the solar charger is of the selected time-window.

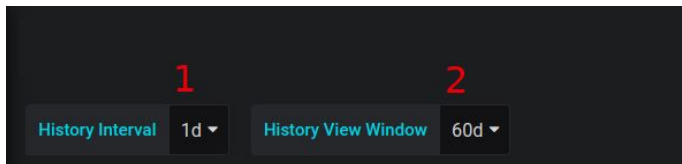
### Voltage

This shows the Voltage of a selected time-window.

## History Tabs

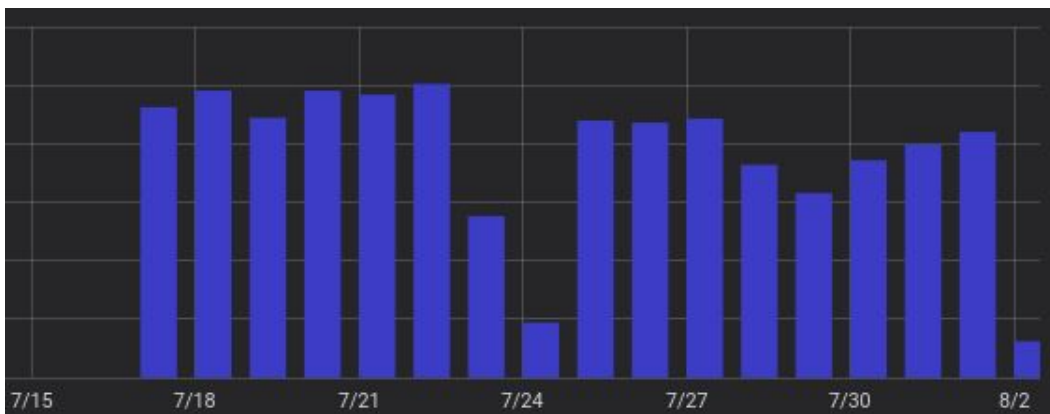
### How to use the History Graphs:

Visual Guide:

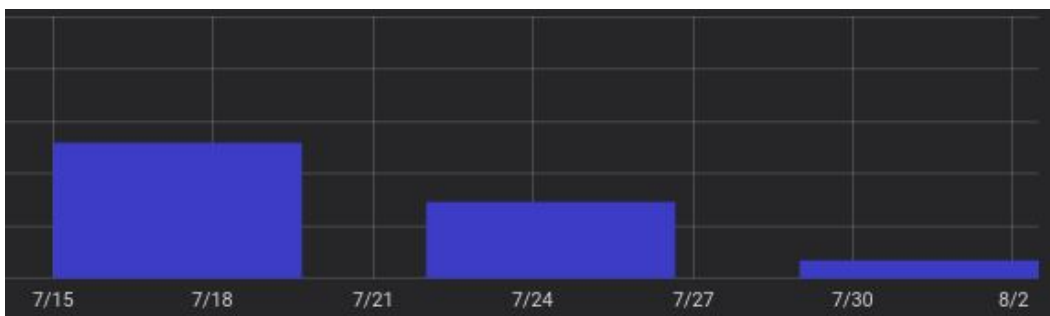


#### 1) History Interval Selector

- Allows a user to select how large/small the intervals are between data points:



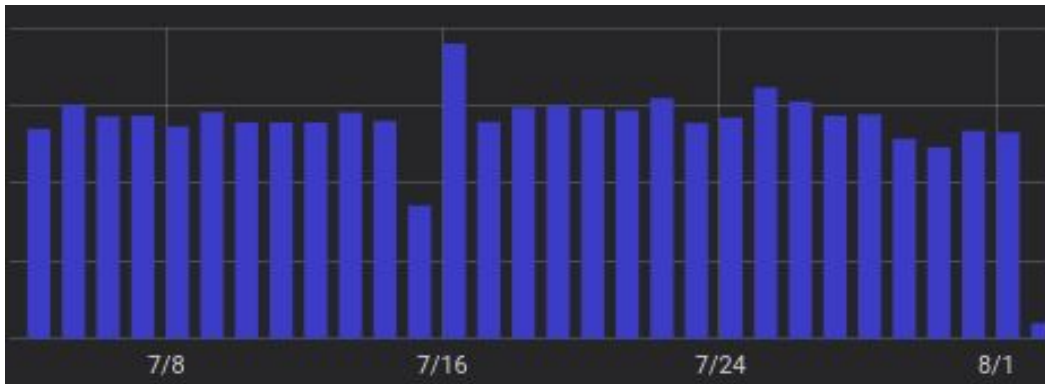
- The above is a part of a graph which has the History Interval selector set to 1 day intervals.



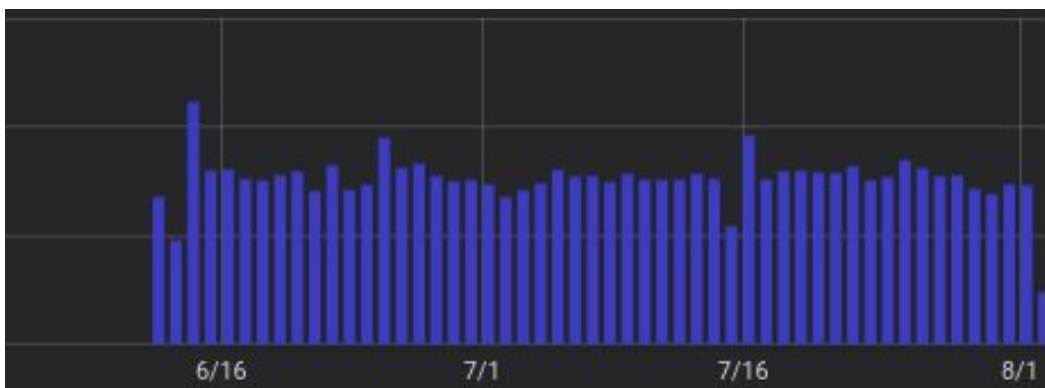
- The above is a part of a graph which has the History Interval selector set to 7 day intervals.

## 2) History View Window Selector

- Allows a user to select how far back the displayed history should be. 30d



- The above is a part of a graph which has the History View window selector set to the previous 30 days.



- The above is a part of a graph which has the History View window selector set to the previous 60 days.

## Using the History Interval and History View Window selectors

When a user requires the history of a value two variables need to be considered:

1. How specific value(s) need to be.
2. How far back (roughly) they would like to view.

In order to retrieve the history - a user should first set the interval of the data (i.e 7 days) to view the data in 7-day-sized-parts.

Once that is complete, the user should select how far back they would like to view (i.e 60 days) - this will allow them to see the previous 60 days of data.



## Alert History Tab

### Monitoring Alerts

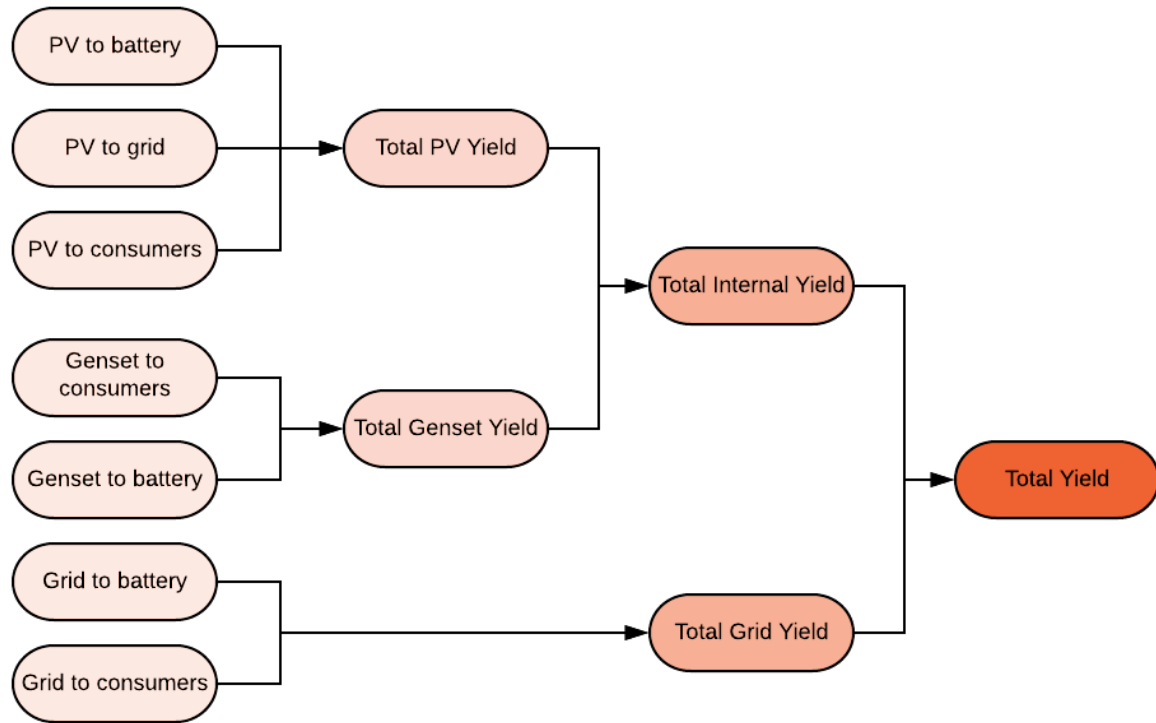
Displays the currently **ACTIVE** alerts.

### Alert History

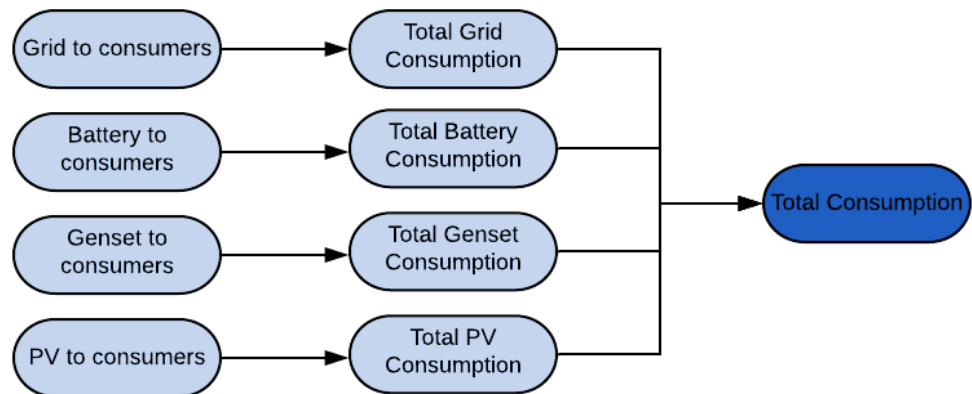
Displays the history of all alerts.

## Understanding the Data

### Yield



### Consumption



## Contact and User Support

Support Team:

Email: [bigbrotherqueries@gmail.com](mailto:bigbrotherqueries@gmail.com)