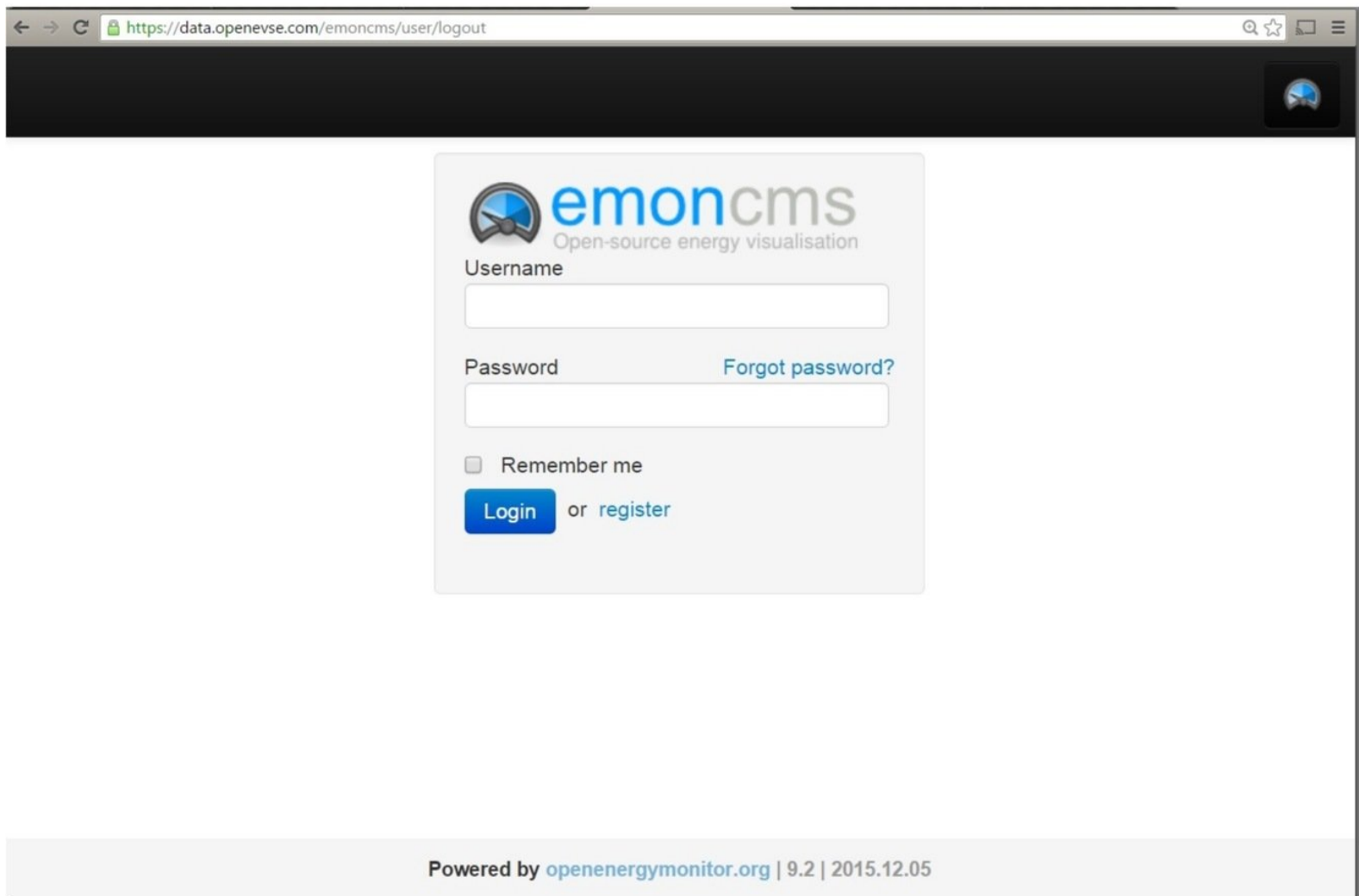


OpenEVSE

Services - EmonCMS

Guide to set up OpenEVSE WiFi and Energy Monitoring

Written By: Christopher Howell



The screenshot shows a web browser window with the address bar displaying <https://data.openevse.com/emoncms/user/logout>. The page content is a login form for EmonCMS. The form includes the EmonCMS logo (a speedometer icon) and the text "emoncms Open-source energy visualisation". Below the logo are input fields for "Username" and "Password". To the right of the password field is a link that says "Forgot password?". Below the password field is a checkbox labeled "Remember me". At the bottom of the form is a blue "Login" button followed by the text "or register". The footer of the page states "Powered by openenergymonitor.org | 9.2 | 2015.12.05".

emoncms
Open-source energy visualisation

Username

Password [Forgot password?](#)

☐ Remember me

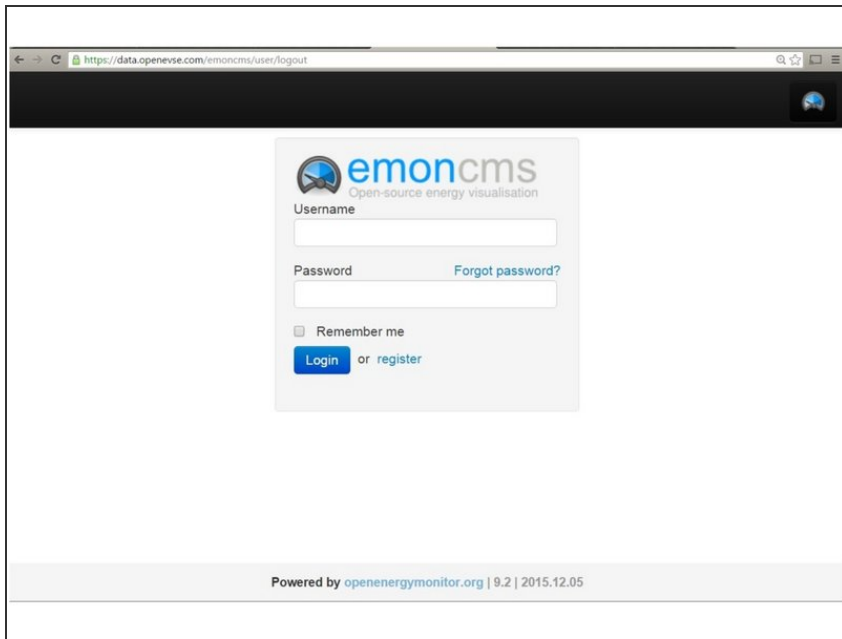
[Login](#) or [register](#)

Powered by openenergymonitor.org | 9.2 | 2015.12.05

INTRODUCTION

Outline what you are going to teach someone how to do.

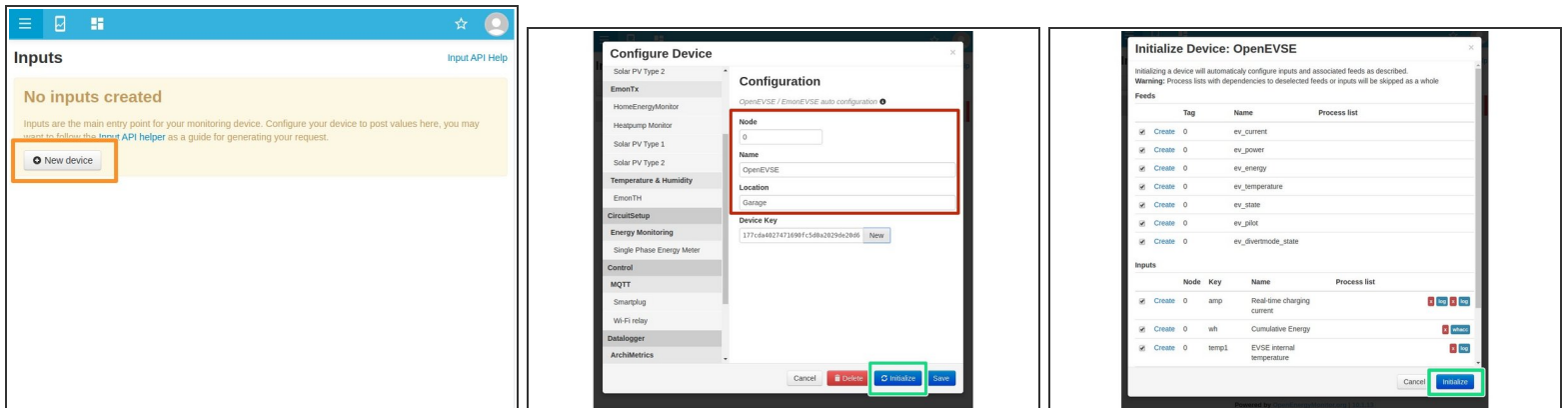
Step 1 — Setup account at OpenEVSE Energy Monitoring site



The screenshot shows a web browser window with the URL <https://data.openevse.com/emoncms/user/logout>. The page features the EmonCMS logo and the text "Open-source energy visualisation". Below the logo is a login form with fields for "Username" and "Password". A "Forgot password?" link is next to the password field. There is a checkbox for "Remember me" and a "Login" button. Below the button is the text "or register". At the bottom of the page, it says "Powered by openenergymonitor.org | 9.2 | 2015.12.05".

- Setup Free account at: [OpenEVSE Energy Monitoring](#)
- Enter Username, Email and Password to register for an Account.

Step 2 — Setup a Device in EmonCMS



- Click on Inputs
- Select New Device
- ❗ In devices already exist click the gear icon on an existing device.
 - Enter Node (0 - 32).
 - 📌 This will be used later in the WiFi module.
 - Enter name and location.
 - Select Initialize the Initialize again.
- Click the gear icon click new and copy the device key.

Step 3 — Service - Energy Monitoring

The left screenshot shows the 'OpenEVSE WiFi' portal with tabs for 'OpenEVSE', 'System', and 'Services'. The 'Services' tab is active, showing the 'Energy Monitoring' section. It includes a checkbox for 'Enable Emoncms', a text field for 'Emoncms Server' (set to 'data.openevse.com/emoncms'), a text field for 'Emoncms Node' (set to '0'), a text field for 'Emoncms write-apikey' (containing a masked key), and a text field for 'Emoncms SSL SHA-1 Fingerprint (optional)'. A 'Save' button is at the bottom, and a status bar shows 'Connected: Yes Successful posts: 6'.

The right screenshot shows the 'data.openevse.com/emoncms/device/view' page. It features a 'Devices' table with the following data:

Name	Location	Node	Type	Device access key	Updated
OpenEVSE	Garage Leaf	0	OpenEVSE	49a521bb7fc8e4f65c3edac518342ca3	n/a

Below the table is a 'New device' button and a 'Devices Help' link.

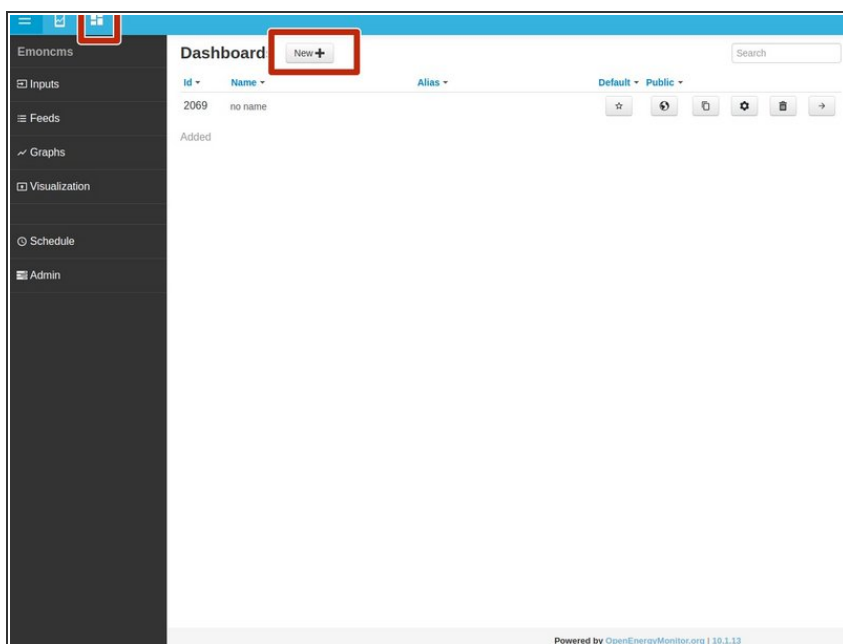
- Login the the OpenEVSE WiFi portal and click on the Services tab.
- Click "Enable EmonCMS" in the services tab.
- Verify the server is set to: data.openevse.com/emoncms
 - Select https:// for the server if available to enable secure mode.
- Set node (0 - 32) Matching the value chosen in the last step.
- Paste the Device Key from EmonCMS to write-apikey.
- Click Save

Step 4 — Energy Monitoring -- Inputs

Inputs			
Node 0			
Node	Key	Name	Process list
0	OpenEVSE_AMP		* feed Power to kWh Power to kWh/d Histogram Log to feed
0	OpenEVSE_VOLT		
0	OpenEVSE_TEMP1		Log to feed Max daily value Histogram
0	OpenEVSE_PILOT		Log to feed
0	API_Update		
0	OpenEVSE_TEMP2		
Node 1			
Node	Key	Name	Process list
1	OpenEVSE_AMP		* feed Power to kWh Power to kWh/d Histogram Log to feed
1	OpenEVSE_VOLT		
1	OpenEVSE_TEMP2		Log to feed Max daily value
1	OpenEVSE_PILOT		Log to feed
1	API_Update		
Node 5			
Node	Key	Name	Process list
5	OpenEVSE_AMP		
5	OpenEVSE_VOLT		

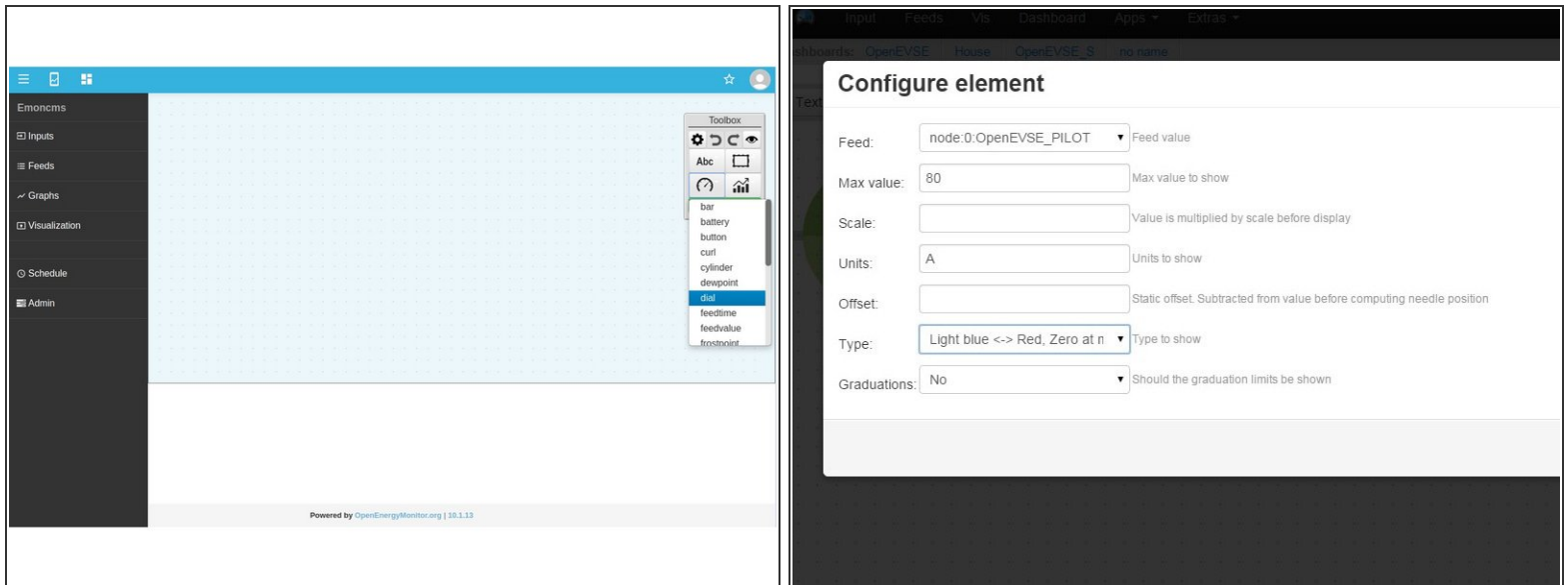
- Go back to [OpenEVSE Energy Monitoring](#)
- Select Inputs - Navigate to Setup => Inputs. The Inputs section should now display live data from OpenEVSE.
- ⓘ Inputs from other sensors can be included such as additional current, temperature, humidity, voltage etc. See [Open Energy Project](#)
- ★ Inputs displays live data from the sensors. This data is not stored, logged or archived.

Step 5 — Setup Energy Monitoring -- Dashboards



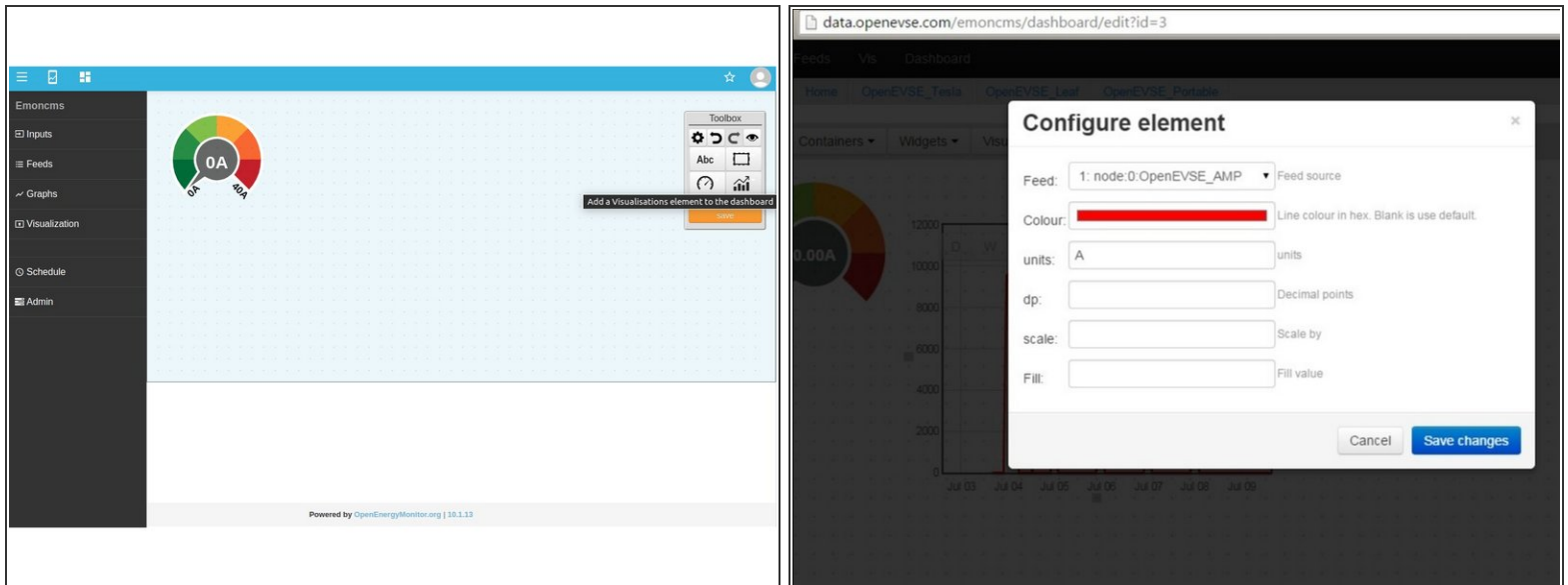
- Dashboards display data logged from the feeds. You can create as many dashboard views as you wish.
- Click on the Dashboard icon and click New + to create your first Dashboard.
- The name can be edited by clicking on the pencil icon.

Step 6 — Setup Dashboard - Dial



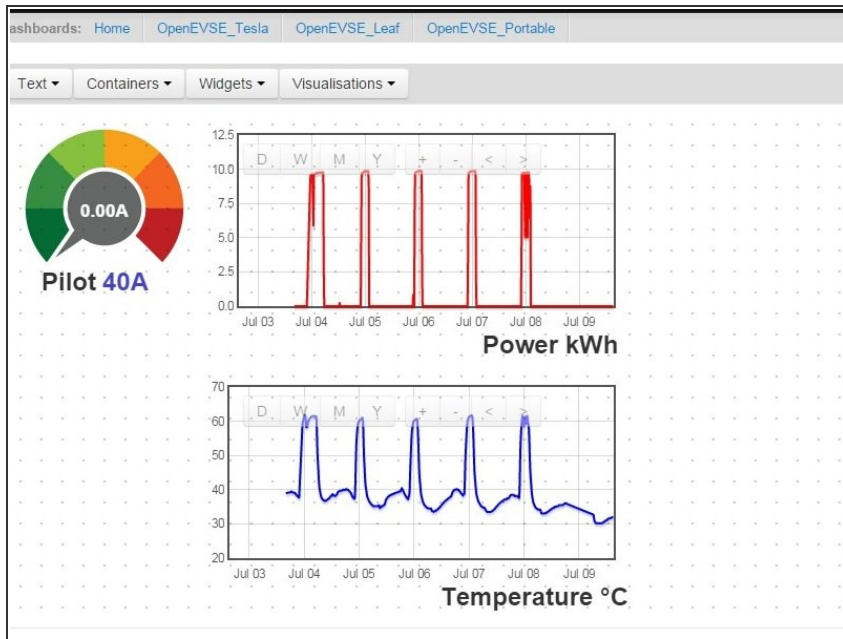
- Select Widgets (Speedometer dial) then select dial.
- Click on grid to place the dial. Move, re-size and adjust as desired.
- Click On the wrench icon to "Configure selected item"
- Select Feed - Set Max Value - Set Units - Pick Type

Step 7 — Setup Dashboard - Rawdata



- Add Rawdata charts for current and temprature. Click on Bargraph icon Visualizations then Rawdata. Click on the grid to add.
 - Click Wrench Icon to Configure selected item.
- Select Feed, Color and Units
- Move and scale as desired.
- Save Changes

Step 8 — Setup Dashboard - Add text and Feed Values



- Add Text Labels
- Feed values can be displayed. Click Widget > Feedvalue