

# WEBVIEW-M

Energy server embedded into *DIRIS Digiware D-70 & D-75* displays



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# 1. Documentation

All the documentation on the WEBVIEW range can be found on the SOCOMEC site at the following address:

[https://www.socomec.com/range-software-solutions\\_en.html?product=/webview\\_en.html&view=documentation](https://www.socomec.com/range-software-solutions_en.html?product=/webview_en.html&view=documentation)

## 2. Before you start

Please familiarise yourself with these instructions before setting up and using WEBVIEW-M

Below is the list of compatible browsers:

- Chrome v30 and later (recommended browser)
- Internet Explorer v9 and later
- Firefox v24 and later

We recommend using a 1920 x 1080 pixel screen format to best display the different contents.

The use of a different screen format may change how certain parts are displayed.

## 3. Introduction

### 3.1. About WEBVIEW

WEBVIEW monitors electrical system in real-time, tracks energy consumption levels and monitors the insulation of IT electrical networks. It is integrated into the measuring system DIRIS A-40, the communication gateways and displays DIRIS Digiware D-70, DIRIS G, ISOM Digiware D-75 and the datalogger DATALOG H80/81.

It is designed for technical users who want a simple, user-friendly and efficient tool to quickly analyse any malfunctions and guarantee energy performance.



With WEBVIEW, you can collect data from DIRIS Digiware devices, DIRIS A and DIRIS B Power Monitoring Devices, COUNTIS energy meters, ISOM Digiware insulation monitoring system and ATyS pM changeover switches, but also more generally any devices that communicate using the Modbus protocol (WEBVIEW-L only).

WEBVIEW is accessible from a simple Web browser on a PC or tablet.

## 3.2. Versions

There are different versions of the WEBVIEW software:

WEBVIEW versions	Host device	Functions
WEBVIEW-S	DIRIS A-40 Ethernet	Monitor Alarms and events Consumption Trends
WEBVIEW-M	DIRIS G	Monitor Alarms and events Consumption (DIRIS G-50) Trends (DIRIS G-50)
	DIRIS Digiware D-70, ISOM Digiware D-75	Monitor Alarms and events Photoview Consumption Trends
WEBVIEW-L	DATALOG H80/H81	Monitor Alarms and events Photoview Consumption Trends

Please note: WEBVIEW-M manages average values based on the integration period configured in devices.

This user guide details the configuration and visualisation features of WEBVIEW-M.

### **3.3. Data file**

See **Appendix 1** of this document for an example of the data file exported to a remote FTP server.

## 4. User profiles

There are three types of profile:

- User (default)
- Advanced User
- Administrator

Access to the User profile is open and no password is required.

The Advanced User and Administrator profiles are authorised to change settings and reset counters.

	Monitoring	Analysis	Reset partial energy	Notification/ devices and hierarchies	Diagnostics	Change passwords	Default password
<b>User</b>	•	•			•		No password
<b>Advanced User</b>	•	•	•		•	Only that of the Advanced User	UserAdvanced
<b>Administrator</b>	•	•	•	•	•	Only that of the Administrator	Admin

Note: Passwords are case-dependent.

## 5. START UP

Like any Web application, the WEBVIEW-M software requires an Ethernet network connection. Just enter the URL of the device in the Web browser to access WEBVIEW-M.

As a reminder, the default IP addresses of the devices embedding WEBVIEW are given in the table below:

WEBVIEW version	Host device	Default IP address
WEBVIEW-M	DIRIS G-30/G-50	192.168.0.2
	DIRIS Digiware D-70	192.168.0.4
	ISOM Digiware D-75	192.168.0.4

### 5.1. Accessing the application

To open the application, enter the login details on the WEBVIEW-M homepage:

- Profiles: User, Advanced User or Administrator
- Password: For Advanced User and Administrator profiles only
- Language: select from the list of available languages



Profile: User

Language: English (United Ki)




Log in

Once authenticated, the user is redirected to the home page displaying the different menus of WEBVIEW-M. The home page menu is dynamic depending on the user's access rights.

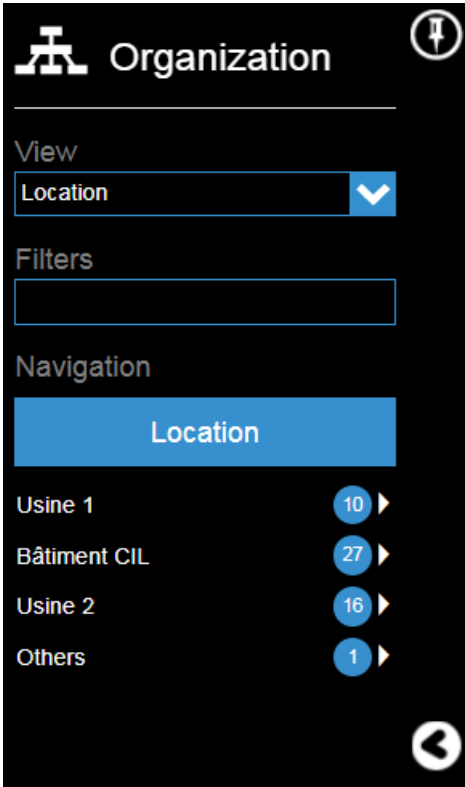
## 6. ERGONOMIC FEATURES

### 6.1. Left pane

Use the left pane of certain WEBVIEW-M pages to browse the data

-  Open left pane
-  Close left pane
-  Pin left pane

### 6.2. Organisation



The Organisation heading on the left pane includes several sections:

View: Dropdown list giving a selection of navigation modes, customised depending on the features:

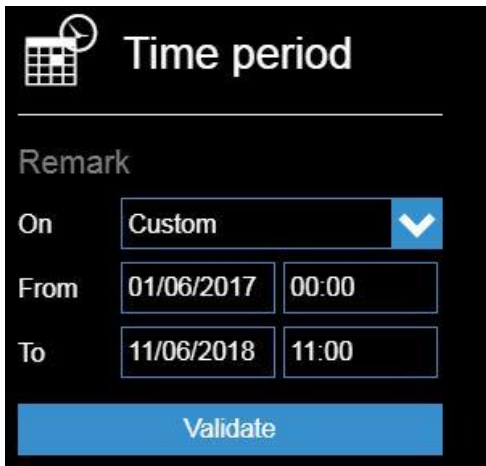
Feature	Browsing mode
Monitor	Location, use, fluid, Photoview
Alarms and events	No left pane
Photoview	No left pane
Consumption	Hierarchy, use, fluid
Trends	Location, use, fluid

Filter: You can filter by name (e.g. I-35 - filters all I-35 devices) or you can filter by location name.

Browsing: Shows the results of the View selection and its filters, and lets you navigate in the network tree. Next to the name of the tree level is the number of loads or related circuits (e.g CIL Building - 27 loads)



### 6.3. Time period



The Time period section in the left pane allows you to select the time period for the display of measurement data. The user can either choose a predefined period (current year or month, etc.), or choose custom dates and times.

### 6.4. Favourites



Only available under the "Trends" menu, the Favourites allows you to save your frequently consulted measurement logs. (For example, the electrical parameters of a process or load curve correlated with one or several influence factors).

### 6.5. Optimising the page display



Click on this icon to show/hide the menu bar at the top of the page



In the "Trends" menu, the user can show or hide the graph configuration while visualising the measurement logs,

## 7. Navigating through the different menus

### 7.1. Home Page



The homepage allows the following functions:

1. Go back to home page
2. Go to WEBVIEW-M settings

**Monitor** section: Real time monitoring of data measured by the devices.

3. **Monitor**: displays real time measurements and power quality analysis of the electrical installation
4. **Alarms and Events**: displays the list of active and finished alarms from SOCOTEC devices
5. **Photoview**: displays real-time measurements on customised background picture (building plan, electrical diagram, electrical panel etc.)

**Analyse** section: Analyses the data stored in the gateway/display

6. **Consumption**: displays consumption data
7. **Trends**: displays the measurement logs (historical data)
8. Shortcut to the **Alarms and Events** menu
9. Log off

**Important:** The data collected and displayed on WEBVIEW-M depends on the technical features of the devices connected. The screens and tabs automatically adapt depending on the devices and their settings.

Example 1: An alarm is not shown if it has not been pre-configured with Easy Config.

Example 2: The **Quality** tab is hidden if the device measuring the load does not have the THD function; the same applies to the **Input/Output** tab which is hidden if the device does not have Inputs/Outputs.

Example 3: The **Monitor** tabs of ATyS-p-M are customised according to the characteristics of the device.

## 7.2. Monitor



The data displayed in the Monitor menu allows the analysis of the network (Summary/Quality) and the analysis of the load (Quality/U/I/Power/Energy/Input/Output/Summary).

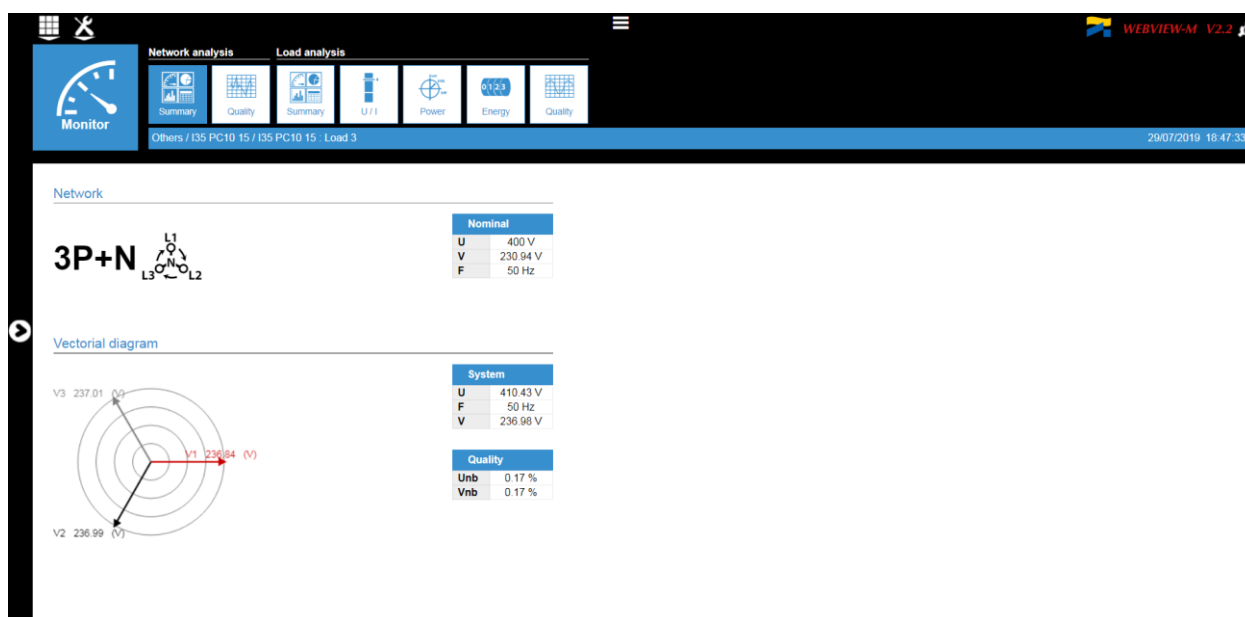
These are real time values collected directly from the devices.

The device to be Monitored must be preselected in the left pane to display its measurements.

### 7.2.1. Monitoring SOCOMEC power monitoring devices

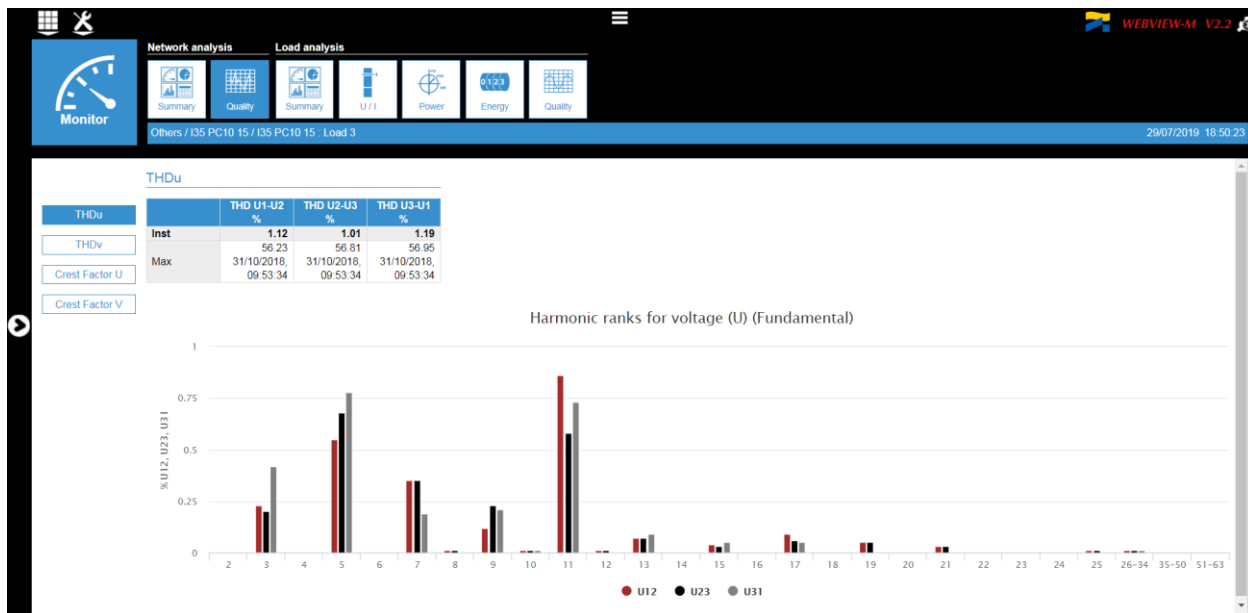
- Network analysis section - Summary

The "Summary" tab shows the type (3P+N) and Vectorial diagram of the network.



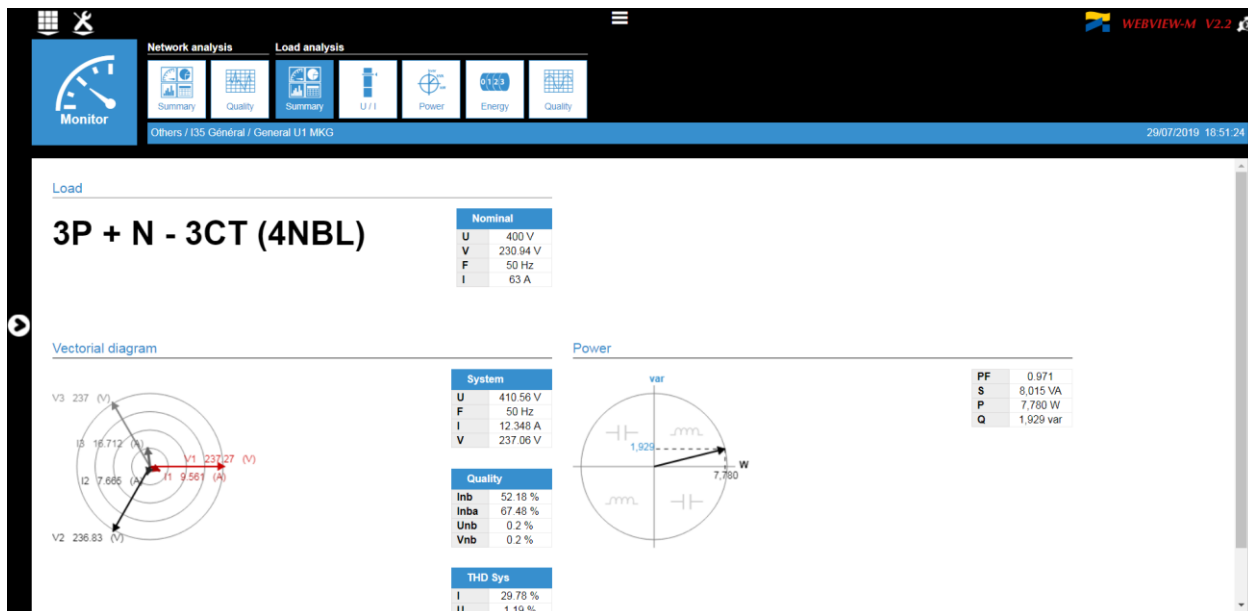
- Network analysis section - Power Quality Monitoring

The "Quality" tab shows the total harmonic distortion (THDu and THDv) and individual harmonics U/V (up to 63rd) of the electrical network.



- Load analysis section - Summary

The "Summary" tab shows the load type, the Fresnel diagram and the four-quadrant power diagram.



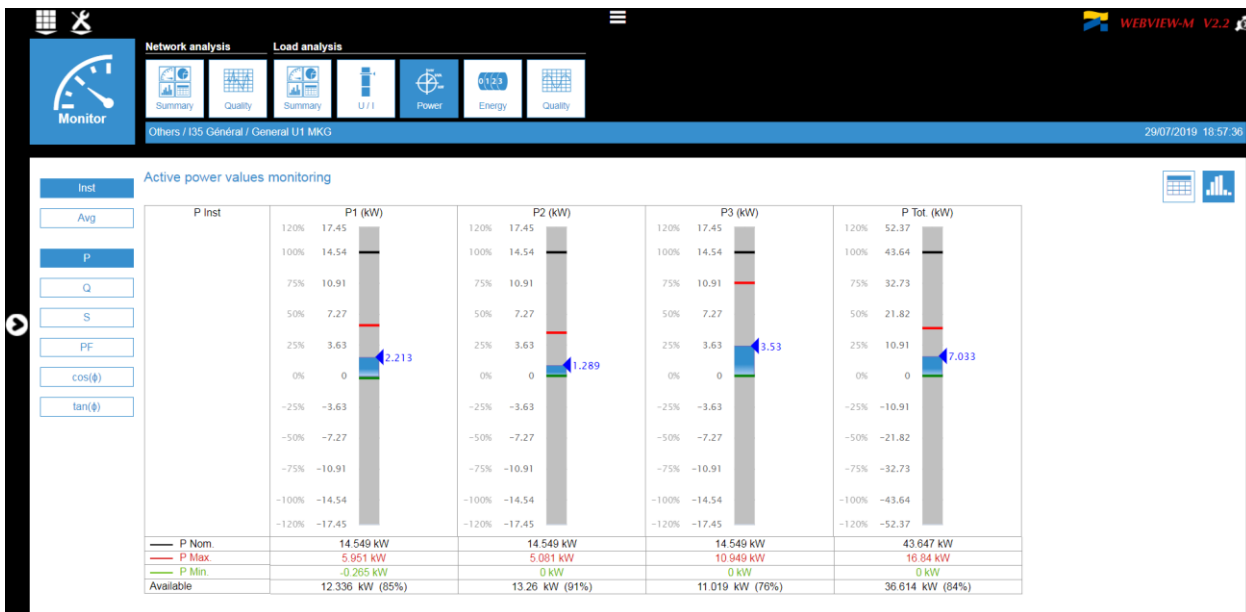
- Load analysis section - Current and voltage monitoring

The "U/I" tab shows instantaneous and average data of currents and voltages on bar graphs. Data can also be represented in tabular form.



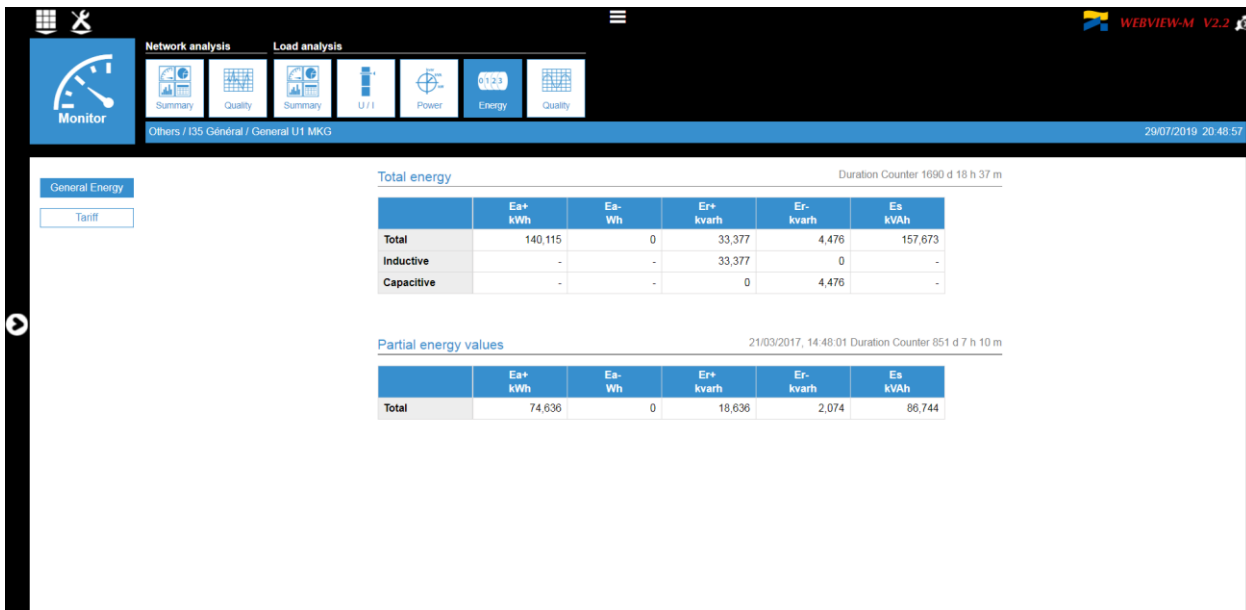
- Load Analysis section - Power monitoring

The "Power" tab shows instantaneous and average power readings (P, Q, S), as well as cos (phi) and tan (phi) values. Data can also be represented in tabular form.



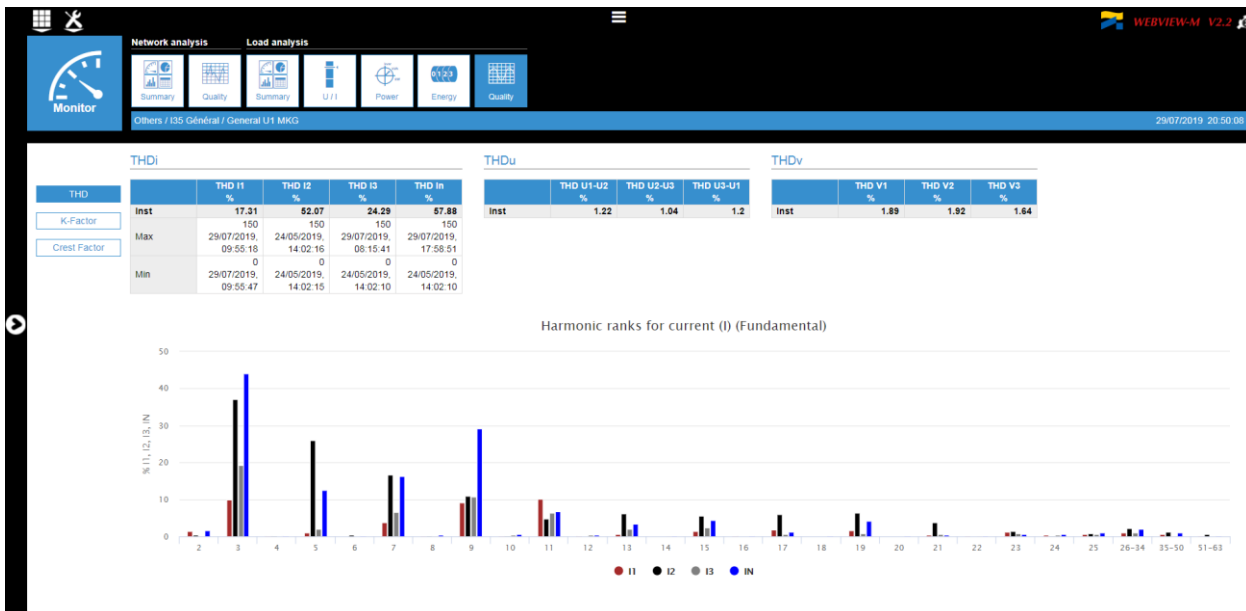
- Load Analysis section - Energy monitoring

The "Energy" tab shows the energy table (Ea+, Ea-, Er+, Er-, Es) and the breakdown over the tariff periods.



- Load Analysis section - Power Quality monitoring

The "Quality" tab shows the harmonic distortion rate (THDi) and individual harmonics I (up to 63rd) as well as the K factor values.



## 7.2.2. Monitoring ISOM Digiware devices (ISOM Digiware D-75)

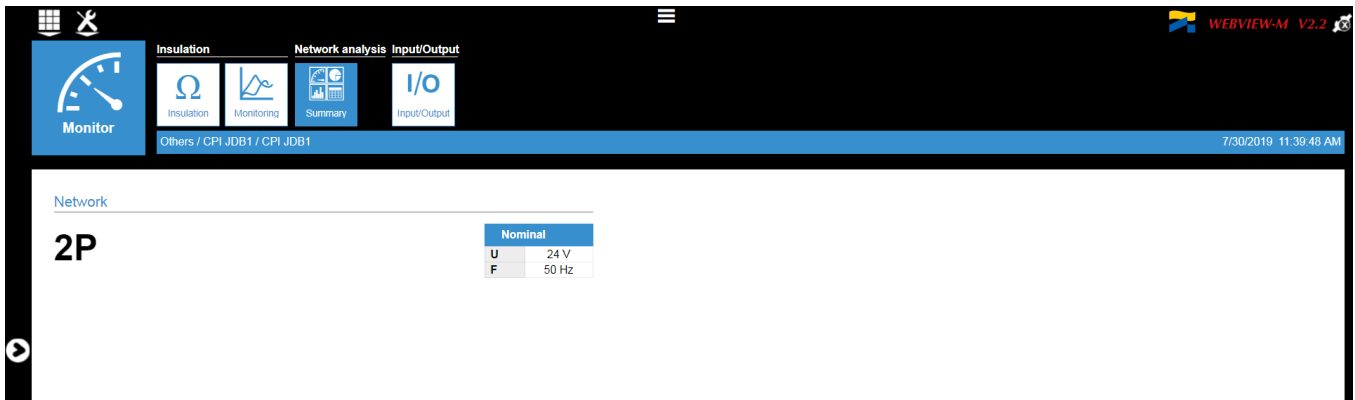
In addition to Power Monitoring Devices (DIRIS Digiware range, DIRIS A and DIRIS B PMDs and COUNTIS energy meters), WEBVIEW-M embedded in the D-75 display also integrates devices from the ISOM Digiware range, in particular the ISOM Digiware L-60 Insulation Monitoring Device / locating current injector, and the ISOM Digiware F-60 insulation fault detection module.

Devices within the ISOM Digiware range are only compatible with the WEBVIEW-M embedded in the ISOM Digiware D-75 display and WEBVIEW-L embedded in the DATALOG H80/H81.

The various Monitoring pages are as follows:

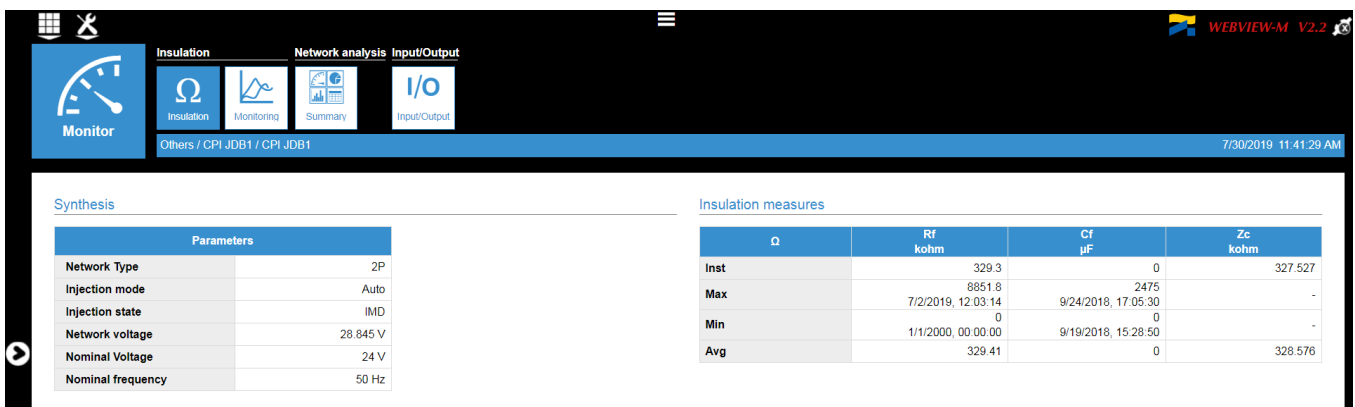
- Network analysis section - Summary

The "Summary" tab displays the electrical network type (1P+N) and nominal values V and F.



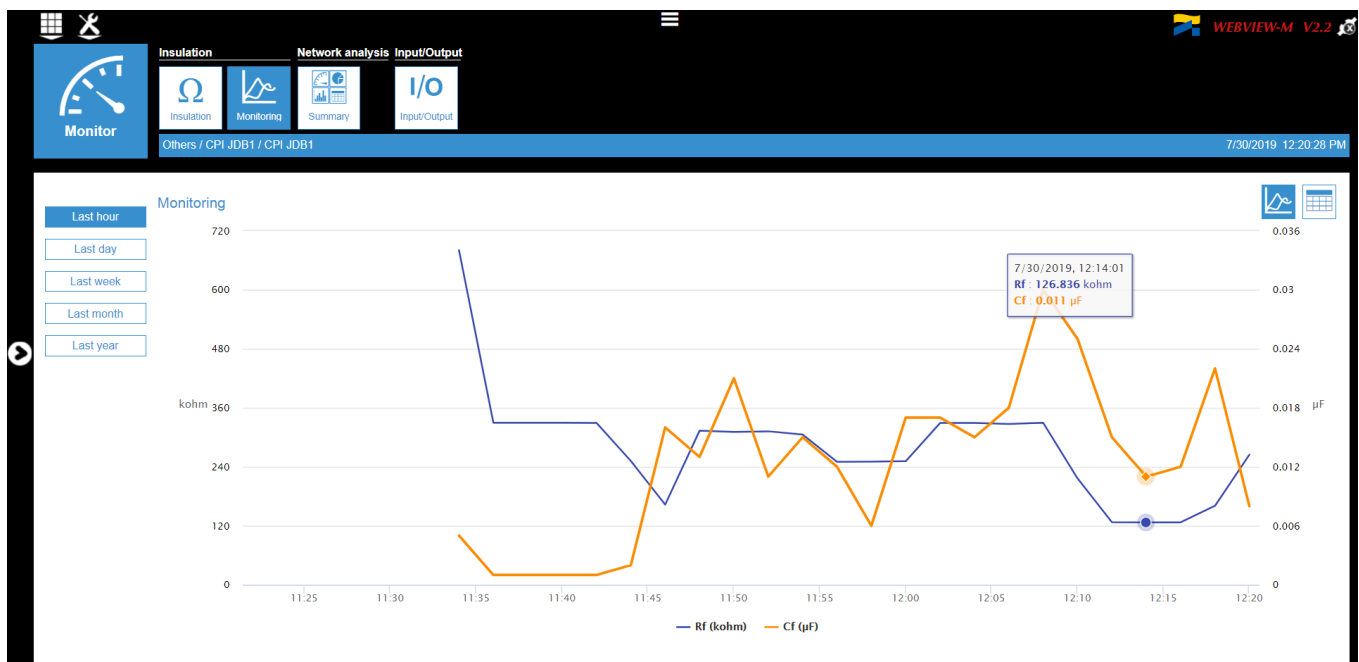
- Insulation section - Insulation

The "Insulation" displays real time, maximum, minimum and average insulation parameters (Rf, Cf and Zc).



- Insulation section - Monitoring

The "Monitoring" tab displays the trend curve of the insulation parameters (Rf and Cf) over different periods (last hour, last day, last week, last month, last year). Data is also displayed in tabular format.



- Insulation - Circuits (for ISOM Digiware F-60 modules)

For each F-60, the "Circuits" tab for ISOM Digiware F-60 modules displays insulation parameters ( $I_{\Delta n}$ ,  $I_L$ , Rf and Cf).

Circuits

7/30/2019 11:45:28 AM

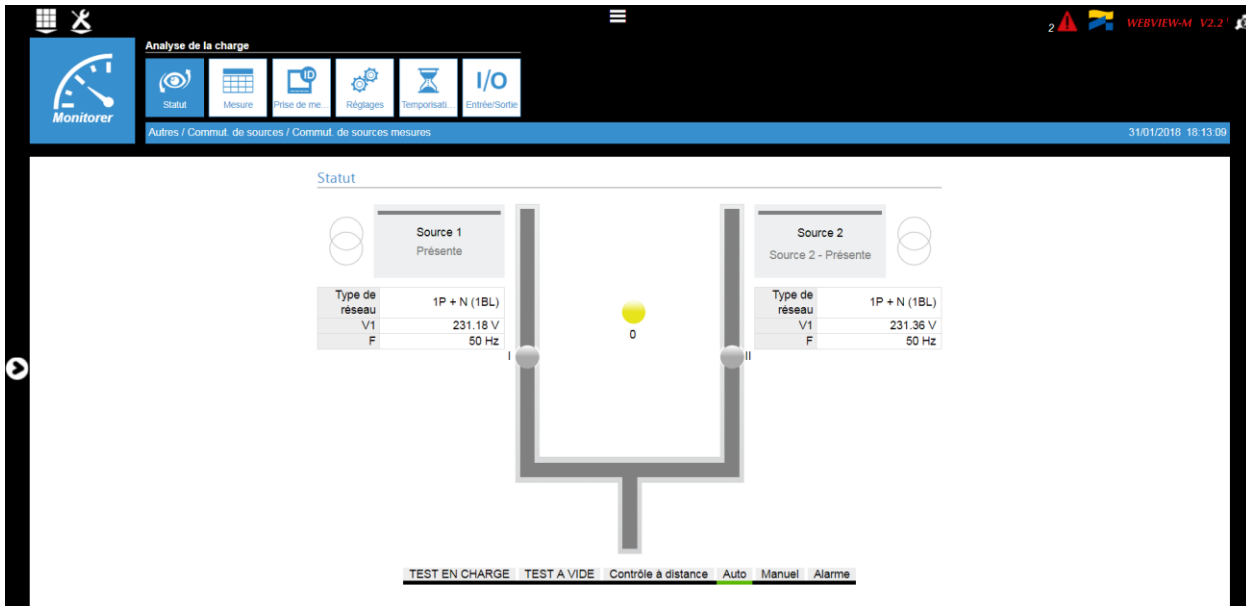
Others / DLD JDB1 / ABA-1650

$\Omega$	Courant ( $I_{\Delta N}$ ) mA	Courant ( $I_{\Delta S}$ ) mA	Rf inst. kohm	Cf inst. µF
ABA-1650	-	0.014	400 7/30/2019, 11:46:27	0 7/30/2019, 11:46:27
MOTEUR1	-	0.015	400 7/30/2019, 11:46:27	51 7/30/2019, 11:46:27
MOTEUR2	-	0.015	400 7/30/2019, 11:46:27	0 7/30/2019, 11:46:27



### 7.2.3. Monitoring ATyS-pM changeover switches

- "Status" tab



## 7.3. Alarms and events



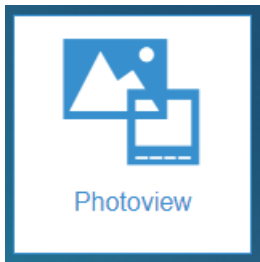
The Alarms and Events menu displays all active and finished alarms from SOCOMEC devices on a dashboard.

The screenshot shows the 'Alarms and Events' dashboard. The interface includes a header bar with a logo and a menu icon. Below the header, there are two main sections: 'Alarm start' and 'Advanced Filters'. The 'Alarm start' section has 'From' and 'To' date pickers. The 'Advanced Filters' section has dropdown menus for 'Source', 'Type', 'Status', 'Category', 'Origin', and 'Criticality'. Below these filters is a table with columns: 'Starting date', 'End date', 'Name', 'Source', 'Type', 'Origin', 'Criticality', 'Status', and 'Actions'. The table contains multiple rows of alarm data. To the right of the table is a detailed view of a selected alarm, showing fields like 'Origin', 'Name', 'Source', 'Starting date', 'End date', 'Status', 'Start of event', and various 'Ref' values with their corresponding 'Value'.

The Alarms and Events page shows the following functions:

1. Selection of the Alarms and Events analysis period
2. Filtering Alarms and Events by data source (Configured devices), by type (Alarms or EN 50160 events, by alarm category and type, by status (active, finished, finished, not acknowledged etc.), by criticality
3. Validates the selection (period and filters)
4. Resets the selection (period and filters)
5. Displays the result of the selection
6. Exports alarm file (zip file with Alarms and Events files)
7. Opens the window showing details of the alarm selected (to the right of the screen)
8. Window showing alarm details

## 7.4. Photoview



The **Photoview** menu allows you to create a custom dashboard by uploading a picture (site map, electrical panel, single-line diagram etc.) and to drag & drop real time measurements directly on the chosen picture.

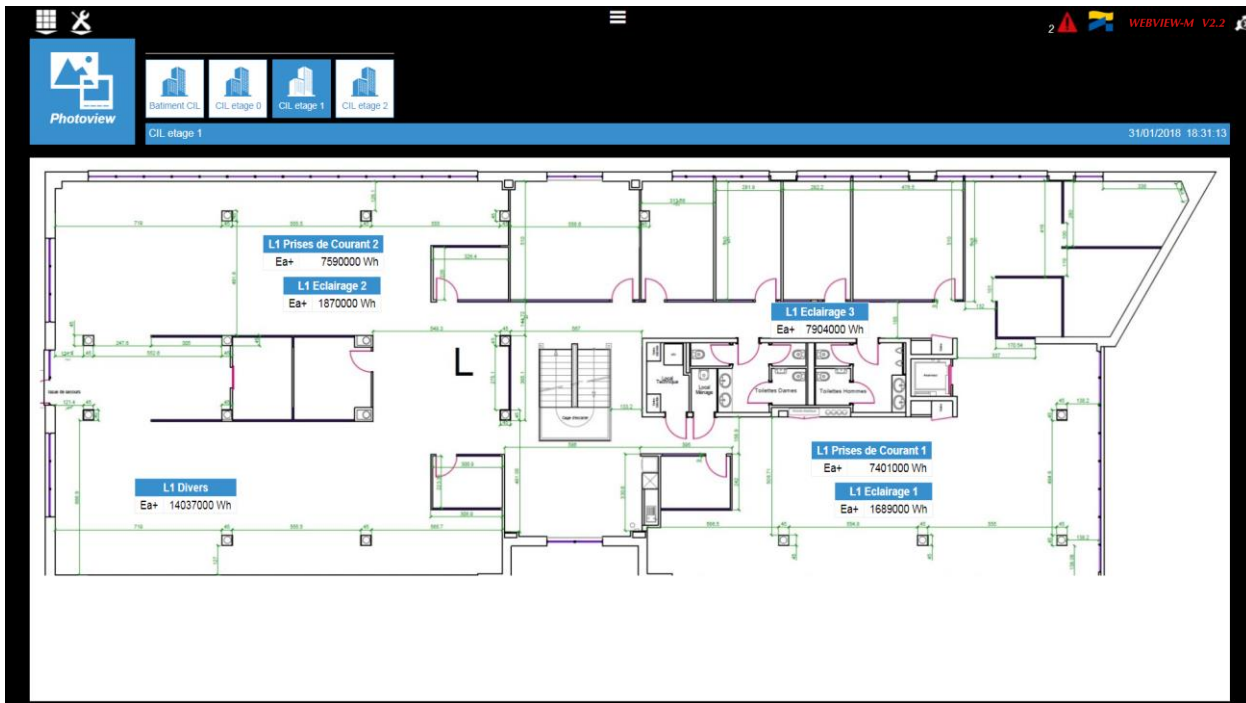
Below is a **Photoview** page based on a picture of the SOCOMEC CIL building, including links to the different floors, pictograms of devices and measurement tables.



1. Tabs of the different Photoview pages created
2. Hypertext link to access another Photoview page: option to create a page tree view
3. Text box
4. Device icon
5. Table of measurements

Below is the Photoview page of the 1st floor of SOCOMEC CIL building, based on a picture of the floor plan and including various measurements related to this area.

When clicking on the various added elements (e.g. a measurement table), the user is redirected to the "Monitor" menu of the associated device.



## 7.5. Consumptions

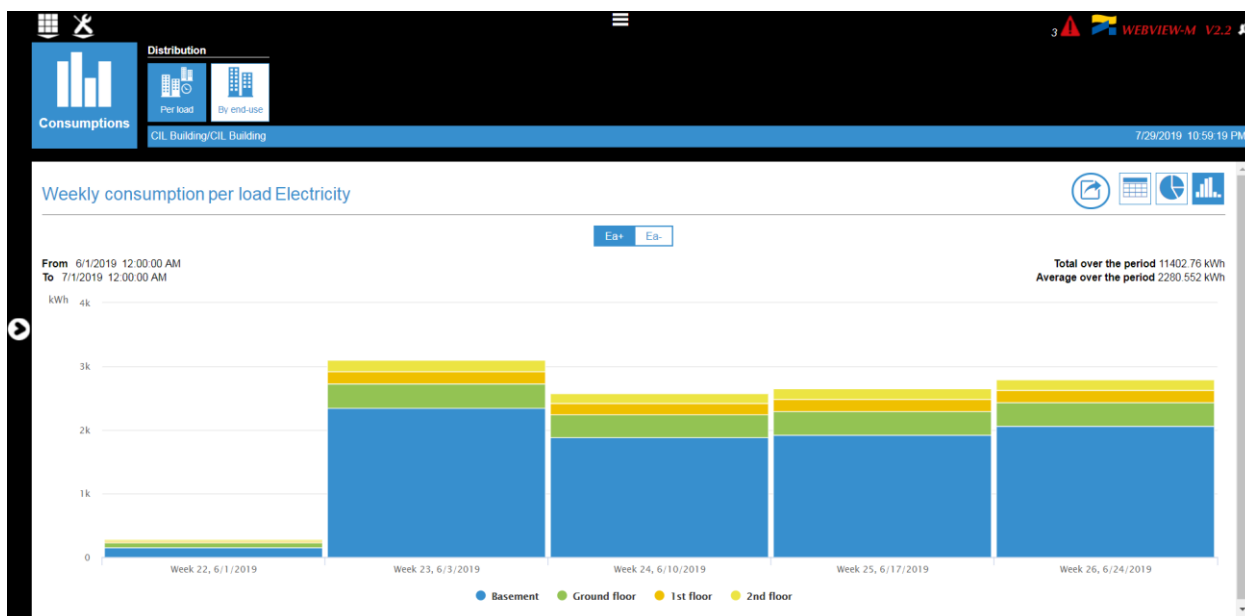


The **Consumptions** menu allows a representation of energy flows consumed by the different loads over specific time periods.

Open the left pane to organise the consumption visualisation by hierarchy, use or utility (fluid) and to choose the time period.

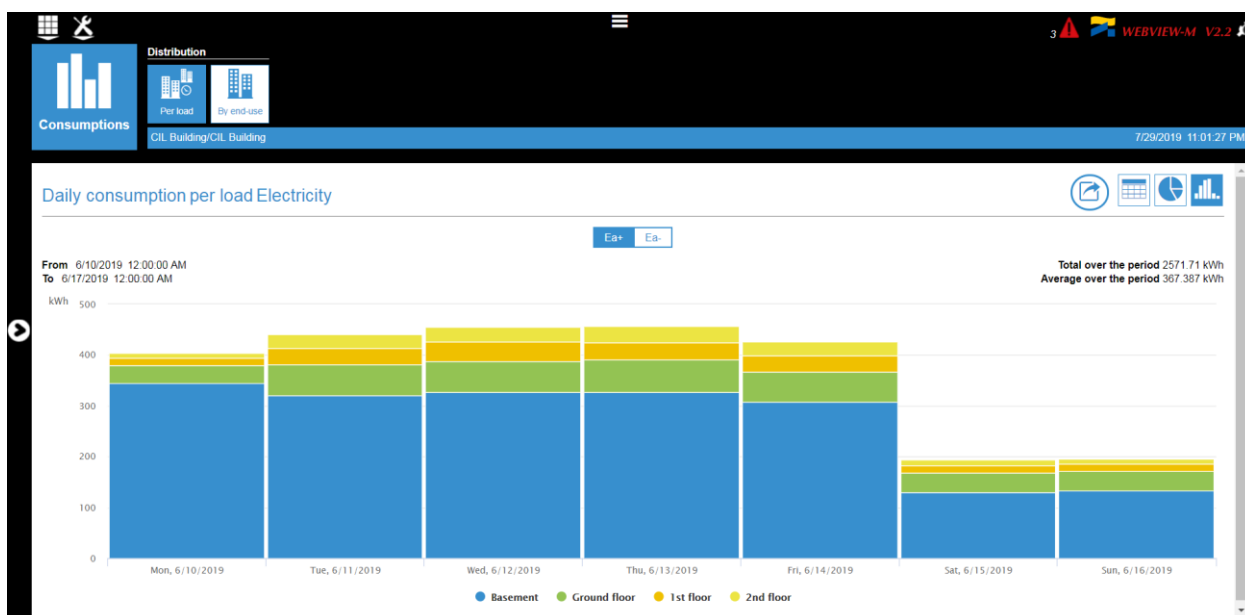
The **Consumptions** menu offers 2 predefined **presentation modes**: by load or by use, based on the hierarchies which have been configured. If no hierarchy has been created, there will be no breakdown of consumptions. The interface will therefore propose a simple view of the consumptions and provide energy indexes recorded per device.

For example, a breakdown of the CIL building's energy consumptions by load for the week of 06/10/2019 to 06/16/2019

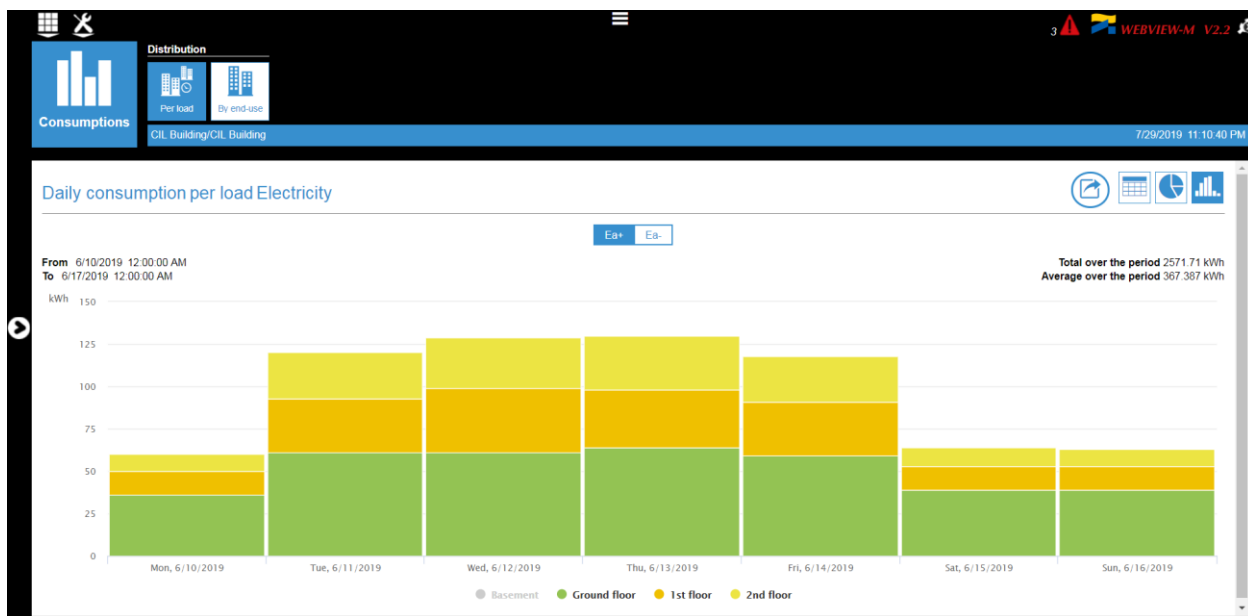


Clicking on a consumption bar displays more detailed time data: Month -> Week -> Day -> Hour

For example, clicking on the weekly bar displays daily consumptions.

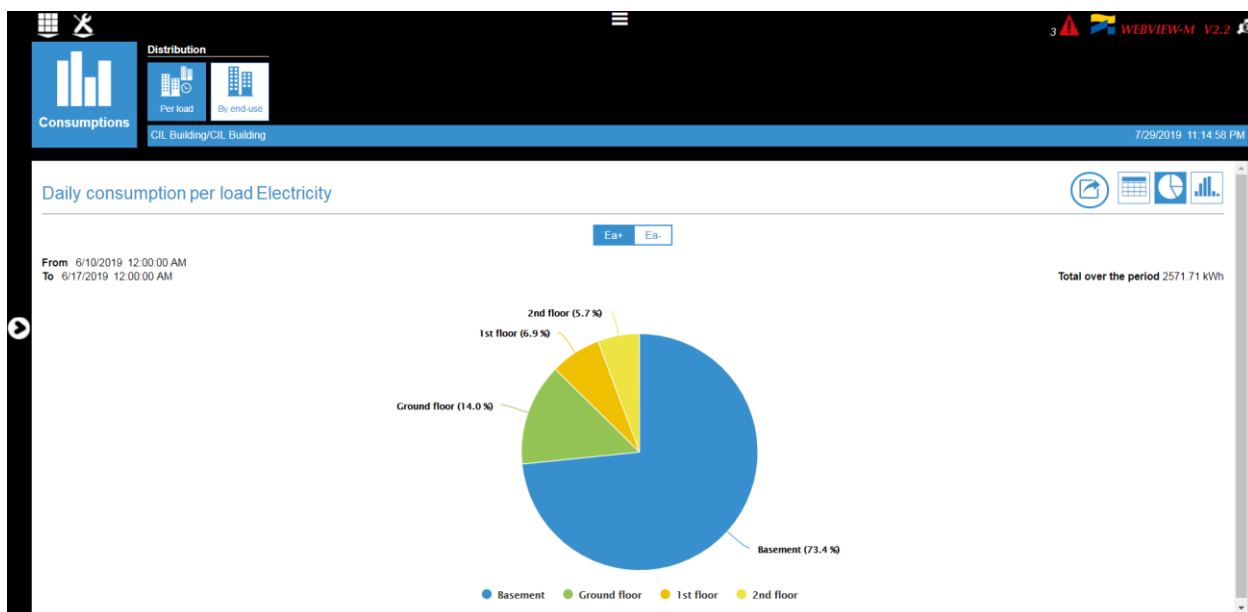


By clicking on one of the load names (in the example: Basement 2), it can be removed from the graph:

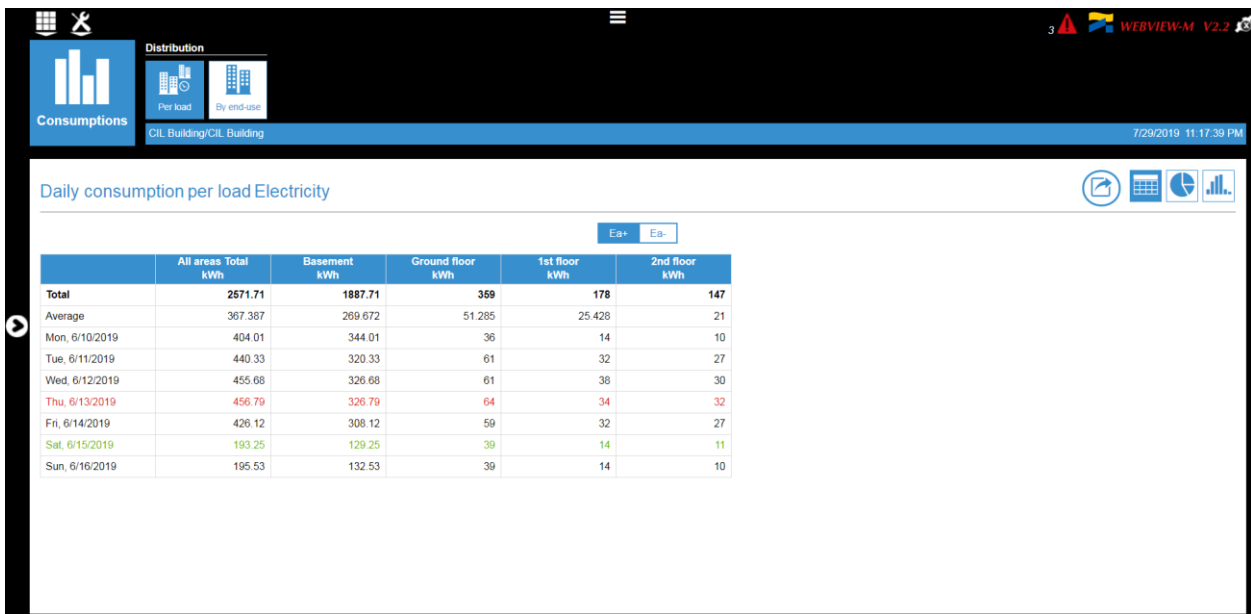


Other graphical representations are available:

- Pie chart



- Table view



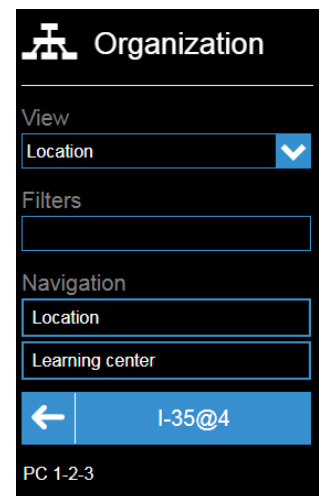
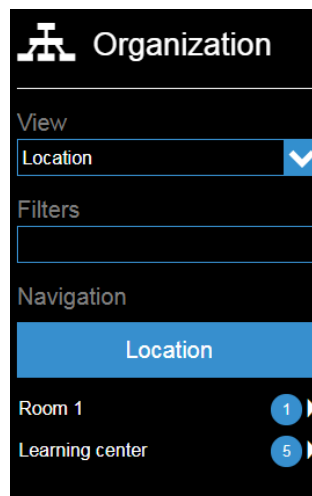
## 7.6. Trends



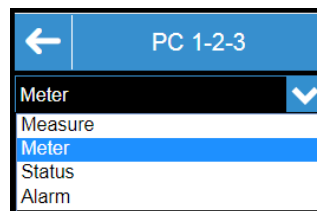
The **Trends** menu displays measurement logs (historical measurements) collected by the devices over the time period selected in the left pane.

First go to the left pane and select the measurements you want to show on the graph.

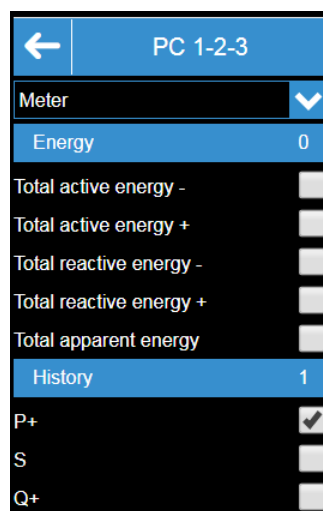
1. Select a location, then select a device within this location, and a circuit for this device (in our case a DIRIS Digiware I-35 module located in the Learning center and measuring a circuit named "PC 1-2-3")



2. Select the data category (Measure, Meter, Status, Alarm)



3. Check the type of data in the category





When selecting the data types, the trends are automatically displayed, over the chosen time period, with scale information on both sides of the graph, according to the different units measured.

You can choose to show several parameters with different units (e.g. voltage, current, power), from one or multiple devices.



1. Create favourites: allows to freeze and save the data selection for later retrieval

Add a favorite

Favorite title

Favorite name

☐ ☐

Enter a name and title for the favourite created

2. Open the configuration pane
3. Data displayed on the graph: show/hide the curves by clicking on the name of the data
4. Selection range within the time period: zoom in on a time period to see the range you want to analyse in detail

Configuration pane

## Configuration

Rendering options

Rendering mode

☐ ☐

Scale auto adjust

☐

Display data table

☐

Data options

General U1 MKG : P tot

☐ ☐

General U1 MKG : U12

☐ ☐

General U1 MKG : In

☐ ☐

1. Change the display mode: several measurements on the same graph or different graphs superimposed on the same time period.
2. Change the scaling type: by default the graph starts from 0, but click on the selector to centre the graph around the minimum and maximum value.
3. Display of the data table for the chosen time period
4. Option to select or delete data

## 8. SETTINGS

Before being able to use the different features offered by WEBVIEW-M, the application must be configured. This section describes the different settings in detail. You need to log in as Administrator (Admin) to access the configuration interface for Devices and Hierarchies.

Click on the "Wrench/Screwdriver" icon  :



1. *Customise - Profile: to change the password*
2. *Diagnosis - Diagnosis: displays information on the gateway/display and downstream devices. Helpful for troubleshooting*
3. *Communication - Datalogger: enables to configure the automatic data exports to an FTP server*
4. *Customise - Devices: enables to configure WEBVIEW-M*
5. *Communication - Network: enables to enter network settings*
6. *Communication - Cloud: future functionality, not available yet*

## 8.1. Diagnosis



1. *Global: detailed analysis of the gateway/display's status and settings*
2. *Device - detailed list of devices connected to the gateway/display*
3. *Export the diagnostic file from the gateway/display*

## 8.2. Communication

### 8.2.1. Datalogger

In the "System" tab under Datalogger, the Administrator can configure the following:

- Under "Identification"
  - Site name: This setting is essential to connect the D-70/D-75 gateway/display to a physical location within the project structure. If the export is in EMS format, the name of the site must be different to the default name ("SITE").
  - Server name: Unique ID of the gateway/display
- Under "Server"
  - Server: To send data files to a remote server, the Administrator selects the FTP(S) server
  - Destination folder: Enter the remote server directory for receiving the files

- Upload log files: Select if you want the gateway to also send the log file to the remote server
- Under "FTP server"
  - Address: Enter the IP address of the remote server
  - Port: Enter the software port (usually 20 or 21 for FTP)
  - User name: enter the login to access the remote server
  - Password: enter the password to access the remote server
  - Secure communication: open a secure session between the gateway and the remote server
  - File format: there are 2 types of file to export the data (CSV and EMS – see appendices 1 and 2). The CSV format is easier to use while EMS is better for importing data into an external energy management software.
  - Test connectivity: Test the FTP export function

## 8.2.2. Network

The screenshot displays the 'Network' settings page of the WEBVIEW-M V2.2 interface. The page has a dark header with a 'Network' icon and a 'Settings' icon. Below the header, there is a breadcrumb trail: 'Others / 135 Général / General U1 MKG'. The main content area is divided into three sections: 'General', 'Advanced', and 'SNTP'. Each section contains various configuration fields and radio buttons. The 'General' section includes 'Enable DHCP' (radio buttons), 'Address' (172.23.19.41), 'Mask' (255.255.0.0), and 'Gateway' (172.23.13.1). The 'Advanced' section includes 'DNS' (172.23.14.54), 'Domain name' (default domain), and 'Host name' (socomec\_EA826A). The 'SNTP' section includes 'Enable SNTP' (radio buttons), 'Address' (172.23.50.105), 'Port' (123), 'Update frequency (s)' (30), 'Enable summer time' (radio buttons), and 'Timezone' (Brussels (UTC+01:00)).

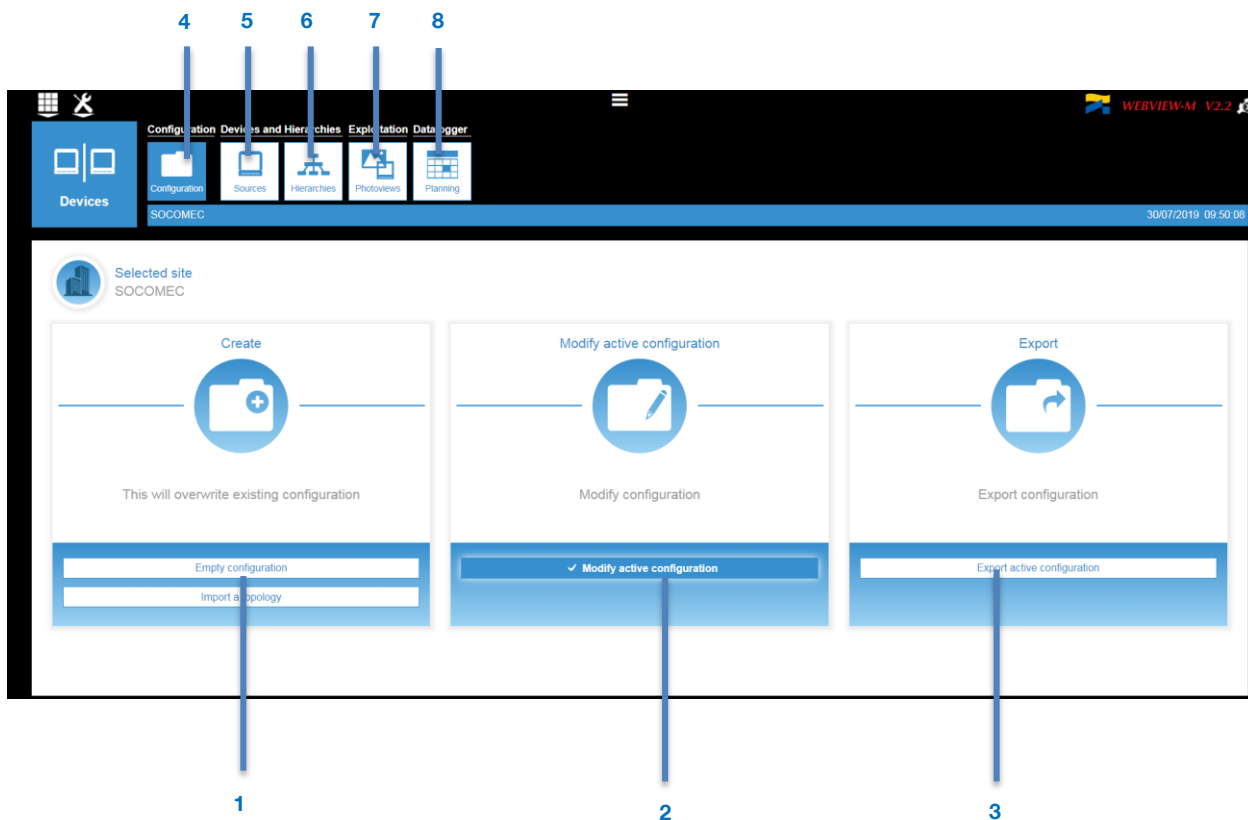
In the "Settings" tab under Network, the Administrator can configure the following:

- Under "General": the type of address: DHCP or fixed, and address details: IP address, Mask, gateway
- Under "Advanced": the IP address and the DNS name, as well as the name of the device embedding WEBVIEW-M
- Under "SNTP": the activation of the SNTP and the various time synchronisation parameters of the device embedding WEBVIEW-M.

## 8.3. Devices and hierarchies

This is where the Administrator configures WEBVIEW-M.

From this menu, the Administrator can either create a new configuration (but remember this will delete an existing configuration stored on the gateway), or edit the existing configuration.



1. *Create: To create a new configuration or import an existing settings profile*
2. *Modify active configuration: To modify the current configuration*
3. *Export: To export the current configuration*
4. *General configuration: To exit and go back to the previous page*
5. *Devices & hierarchies - Source: To create data sources and circuits/loads*
6. *Devices & hierarchies - Hierarchies: To create and manage hierarchies*
7. *Exploitation - Photoviews: To create and manage Photoview pages*
8. *Datalogger - Scheduling: Configure the FTP(S) export schedule.*

## 8.4. Device creation

### 8.4.1. Sources tab

1 2 3

WEBVIEW-M V2.2

30/07/2019 10:06:23

Research

Reference	Name	Area	IP address	Modbus address	Network ID	Status	Actions
D-70	D-70		localhost	1	EDEA826A		
I-35	I35 PC10 15		localhost	3	BA7A7EB1		
U-30	U-30		localhost	6	7F5EFA93		
I-35	I35 P16 P18 P20		localhost	5	E6DBEDB1		
I-35	I35 P17 P19 P21		localhost	7	DFA340F1		
I-35	I35 Général		localhost	21	18713925		

4 5

To open the page to create SOCOMEC devices:

1. From the main "wrench/screwdriver" page, under the "Customise" section, click on "Devices", then click on "Modify active configuration"
2. Select the "Sources" tab
3. Select the "Data Sources" sub menu
4. Click on the "AutoDetect" icon on the right bottom corner to detect and add SOCOMEC devices to the display or gateway's topology
5. Click on the "+" icon for manually creating products one at a time. Adding a gateway or display will add the entire topology under that gateway or display

## 8.4.2. Creating devices one at a time

The Administrator selects the reference of the new device and fills out all the fields related to that device (name, area, IP address and Modbus address).

After validation, the device is added to the sources list and its loads, as configured in the device are added to the "Circuits" menu.

[Add devices](#)
✓ ✕

Reference  
D-50 ▼

Name

Area

IP address

Modbus address

The various SOCOMEC devices that are supported by WEBVIEW-M are given in the following list:

<b>Passerelles</b>	<b>COUNTIS</b>	<b>ISOM Digiware</b>	<b>Gateways</b>	<b>COUNTIS</b>	<b>ISOM Digiware</b>
D-50	Ci	F-60	D-50	Ci	F-60
D-50v2	E03	L-60	D-50v2	E03	L-60
D-55	E04	L-60h	D-55	E04	L-60h
D-55h	E13	<b>Autre</b>	D-55h	E13	<b>Other</b>
D-70	E14	ATySpM	D-70	E14	ATySpM
D-75	E23	Inconnu	D-75	E23	Unknown
G-30/G-40	E24	<b>Anciens Diris A</b>	G-30/G-40	E24	<b>Diris A Old</b>
G-50/G-60	E33	A10	G-50/G-60	E33	A10
<b>DIRIS B</b>	E34	A20	<b>DIRIS B</b>	E34	A20
B-30 RF	E43	A20v2	B-30 RF	E43	A20v2
B-30 RS485	E44	A40v2	B-30 RS485	E44	A40v2
B10	E44R	A40v3	B10	E44R	A40v3
<b>DIRIS Digiware</b>	E53		<b>DIRIS Digiware</b>	E53	
D-15h	ECI2		D-15h	ECI2	
D-40	ECI3		D-40	ECI3	
I-30	<b>DIRIS A</b>		I-30	<b>DIRIS A</b>	
I-30 dc	A-10		I-30 dc	A-10	
I-31	A-20		I-31	A-20	
I-33	A-30		I-33	A-30	
I-35	A-40		I-35	A-40	
I-35 dc	A-40 Ethernet		I-35 dc	A-40 Ethernet	
I-43	A-40 Profibus		I-43	A-40 Profibus	
I-45	A14		I-45	A14	
I-60	A17		I-60	A17	
I-61	A17 2In		I-61	A17 2In	
IO-10	A17 THD		IO-10	A17 THD	
IO-20	A17 THD 2In		IO-20	A17 THD 2In	
S-130	A60		S-130	A60	
S-135	A80		S-135	A80	
S-Datacenter			S-Datacenter		
U-10			U-10		
U-20			U-20		
U-30			U-30		
U-31 dc			U-31 dc		
U-32 dc			U-32 dc		

Once the Administrator has created the devices, he can:

- Manage devices - "Sources" page - "Data Sources" tab
- Manage measurement circuits / loads - "Source" page - "Circuits" tab

### 8.4.3. Manage devices - "Sources" page - "Data Sources" tab

Research

Select all the products? ☐

Reference	Name	Area	IP address	Modbus address	Network ID	Status	Actions
D-70	D-70		localhost	1	EDEA826A		
I-35	I35 PC10 15		localhost	3	BATA7EB1		
U-30	U-30		localhost	6	7F5EFA93		
I-35	I35 P16 P18 P20		localhost	5	E6DBEDB1		
I-35	I35 P17 P19 P21		localhost	7	DFA340F1		
I-35	I35 Général		localhost	21	18713925		

1 2 3

10

From the "Data Sources" submenu, the Administrator can manage all devices:

1. Search by name, area, IP address
2. Confirm your selection and/or perform a search
3. Reset filter to show all devices
4. Select all the devices of the active page
5. Select all the devices of all the pages
6. Unselect
7. Select a device
8. Refresh row
9. Edit fields for this device
10. Set the number of rows per page
11. Refresh all rows
12. Delete all selected devices
13. Go from one page to another



## 8.4.4. Manage measurement circuits

The screenshot shows the 'Manage measurement circuits' interface. At the top, there is a navigation bar with tabs for 'Configuration', 'Devices and Hierarchies', 'Exploitation', and 'Datalogger'. Below this is a sub-navigation bar with icons for 'Configuration', 'Sources', 'Hierarchies', 'Photoviews', and 'Planning'. The main content area is titled 'Data Sources' and 'Circuits'. It features a search bar labeled 'Research' and a table of measurement circuits. The table has columns for 'Name', 'Area', 'Circuit', 'Fluid', 'Index', 'Use', 'Status', and 'Actions'. The 'Actions' column includes icons for selecting, editing, and deleting circuits. Callouts 1 through 8 point to various elements: 1 points to the search bar, 2 points to the search button, 3 points to the refresh button, 4 points to the 'Select all the circuits?' checkbox, 5 points to the 'Select all the circuits of all the pages' checkbox, 6 points to the 'Select a circuit' checkbox, 7 points to the 'Edit the field of the selected circuit' icon, and 8 points to the 'Edit the fields of multiple selected circuits' icon.

Name	Area	Circuit	Fluid	Index	Use	Status	Actions
D-70		D70 - Miscellaneous	Undefined	-	Undefined		
I35 PC10 15		I35 PC10 15 : Load 1	Electricity	Load 1	Auxiliary (fan, purr)		
I35 PC10 15		I35 PC10 15 : Load 2	Electricity	Load 2	Auxiliary (fan, pumps)		
I35 PC10 15		I35 PC10 15 : Load 3	Electricity	Load 3	Outlet		
I35 P16 P18 P20		I35 P16 P18 P20 : Lo...	Electricity	Load 1	Auxiliary (fan, pumps)		
I35 P16 P18 P20		I35 P16 P18 P20 : Lo...	Electricity	Load 2	Outdoor lighting		
I35 P16 P18 P20		I35 P16 P18 P20 : Lo...	Electricity	Load 3	Outdoor lighting		
U-30		U30 - Divers	Undefined	-	Undefined		

From this page, where the list of measurement circuits (circuits from the same device are grouped by colour) is displayed, the Administrator can:

1. Search by name, area, circuit
2. Confirm the selection and/or perform a search
3. Show all circuits
4. Select all the circuits of the active page
5. Select all the circuits of all the pages
6. Select a circuit
7. Edit the field of the selected circuit (name, flow and use)
8. Edit the fields of multiple selected circuits (flow and use)

## 8.5. Hierarchies

Create hierarchies to organise measurement points in the form of a tree, to have a practical overview of the loads.

A hierarchy generally represents a geographical organisation (site => building => areas) so you can see the energy breakdown across the different areas.

There are other display modes to choose from: by electrical chart, by the services of an organisation, etc.

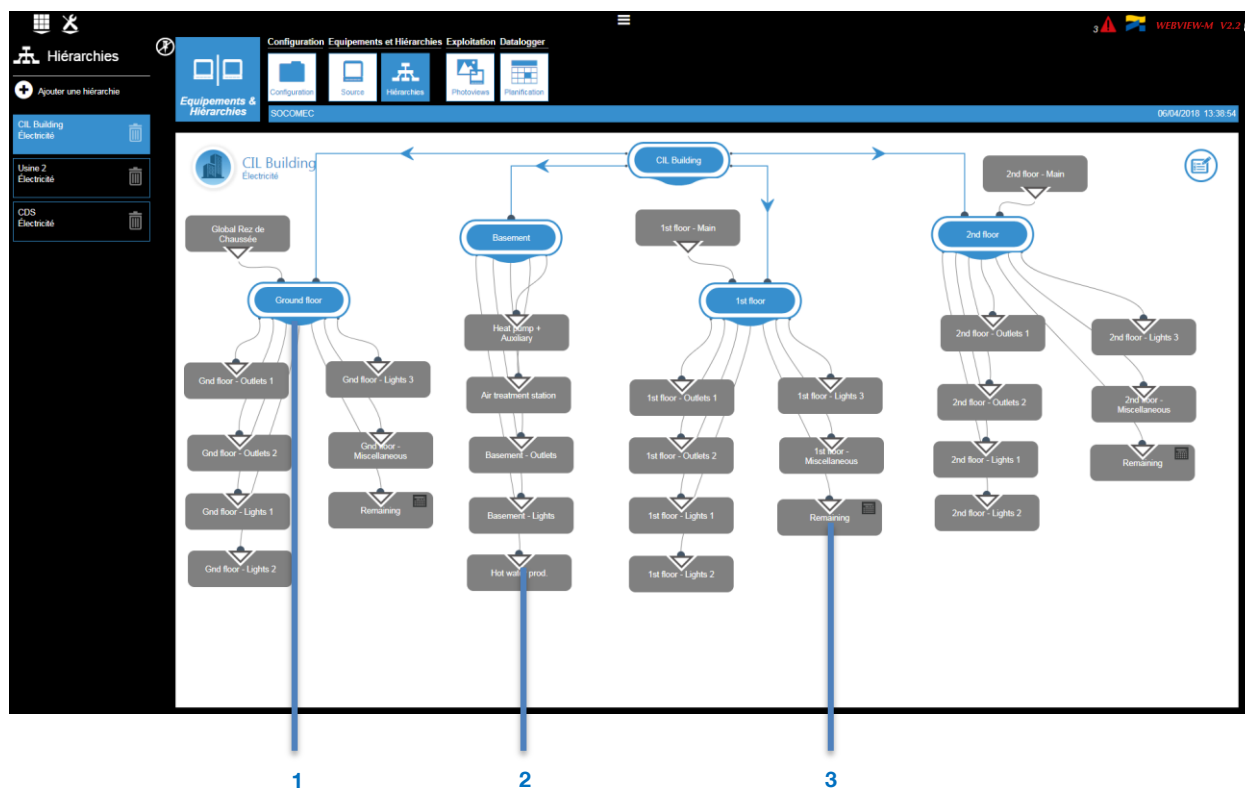
### 8.5.1. Rules for creating hierarchies

A hierarchy is made up of 3 elements, as follows:

- Node: Splits the tree into various hierarchical levels (max. 32 per hierarchy)
- Hierarchy: Create hierarchical parent/child links between different hierarchies so you can show more complex multi-level hierarchies, with multiple measurement points (example of a multi-level hierarchy: Campus - Buildings - Floors - Corridors)
- Circuits: Correspond to the measurement points carried by a device (max. 50 per hierarchy)
- Non-measured point: Automatically calculates a non-measured circuit.

The rules for creating hierarchies are as follows:

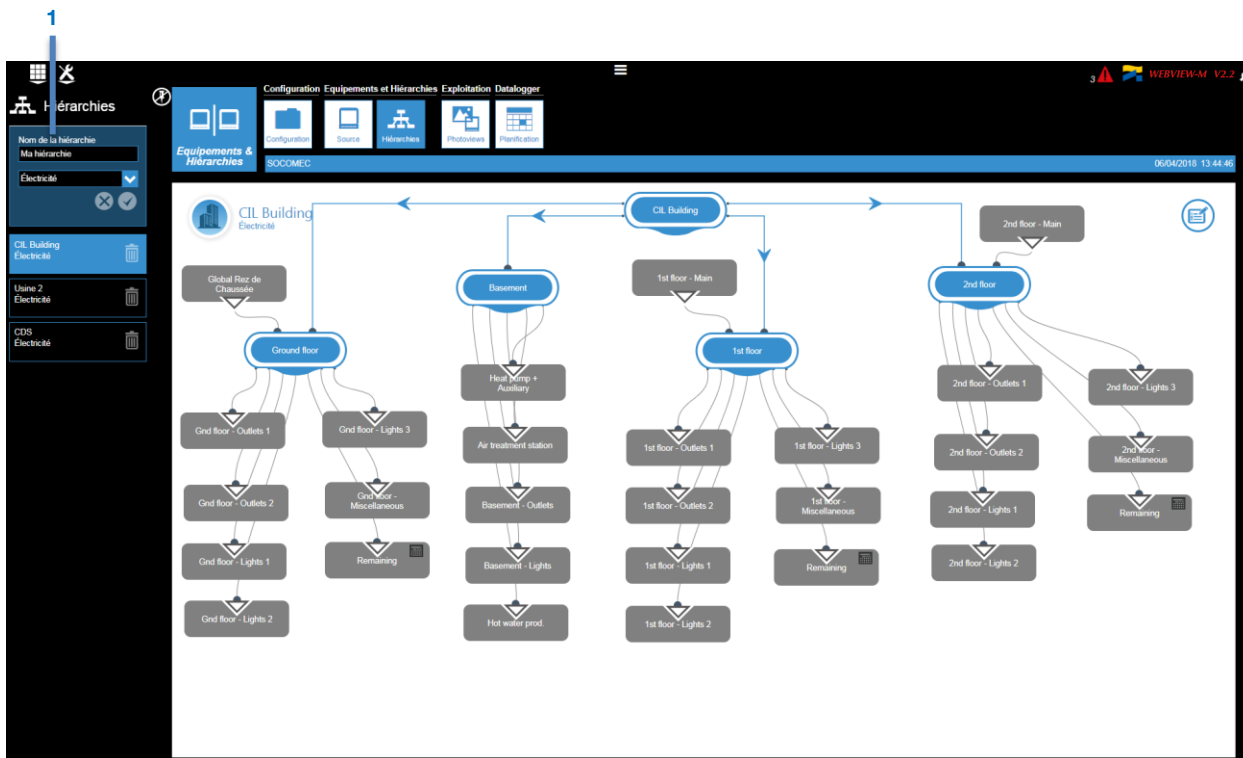
- A hierarchy is for a single utility type (e.g. electricity) and cannot include multiple utilities (water, gas, electricity)
- You can create up to 10 different hierarchies
- The hierarchies can be interlinked to create multi-level hierarchies (levels 1, 2, 3...). This is useful for large-scale power monitoring systems.



1. Node
2. Circuit
3. Non-measured point = (Global 1st floor) - (all loads measured on Floor 1)

## 1. Creating a new hierarchy.

To create a new hierarchy, the Administrator enters a name and selects a utility type (1). After confirming, an empty hierarchy is created containing its main node only.



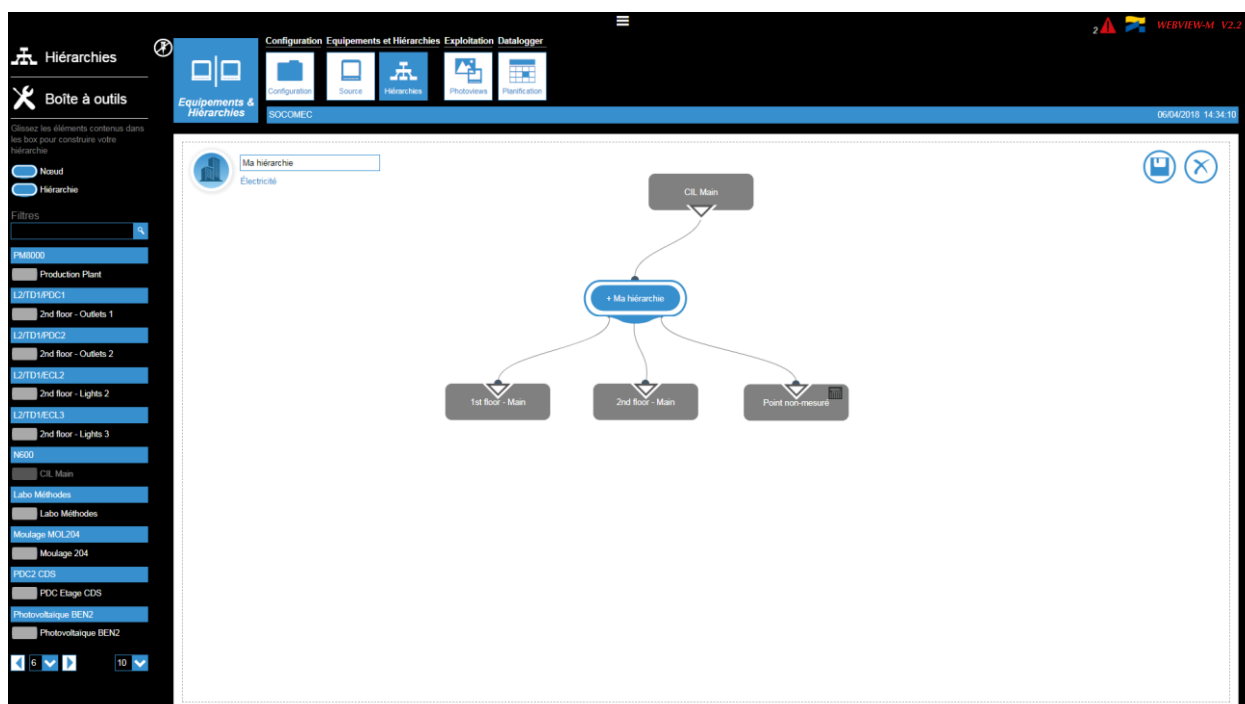
## 2. Building the hierarchy

To build the hierarchy, the Administrator has different modules to choose from in the left pane (Node, Hierarchy and Load). Just drag & drop the modules onto the hierarchy construction page and create links between them.

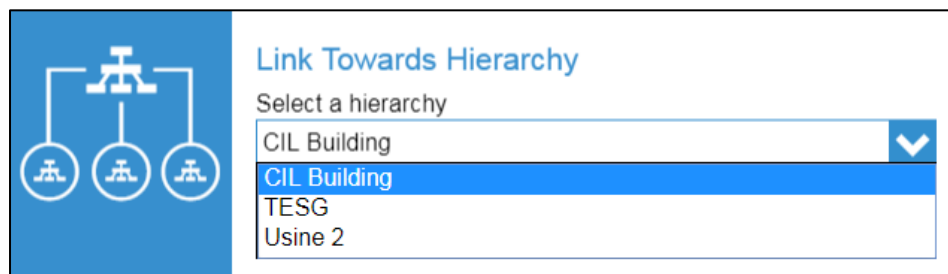
Click on a node to rename it.

You can create links between nodes and loads. Set them in the direction of flow, using the mouse to drag a link from the handle under the node, or drag a load to another node/load. A triangle appears on the measuring point indicating the direction of the energy flow.

When you create a link from a load (CIL Main) to a node (My hierarchy), the system automatically generates a Non-Measured Point that automatically computes the delta between the load associated with the node and all the loads attached to that node.



By dragging and dropping a "Hierarchy" module, the Administrator can create parent/child links between the current hierarchy (parent) and the already existing hierarchies (children).



Once the hierarchy is created, you can visualise the energy consumption breakdown per load and per usage in the Consumption menu accessible from the home page.

## 8.6. Photoview

Photoview allows you to customise the display of the data using background images of the client (Building Map, single-line diagrams, picture of panel etc.).

Measurement data can be displayed in the form of a value chart, against the background image chosen by the Administrator.

Once they are set up, Photoview pages can be viewed by all WEBVIEW-M users.

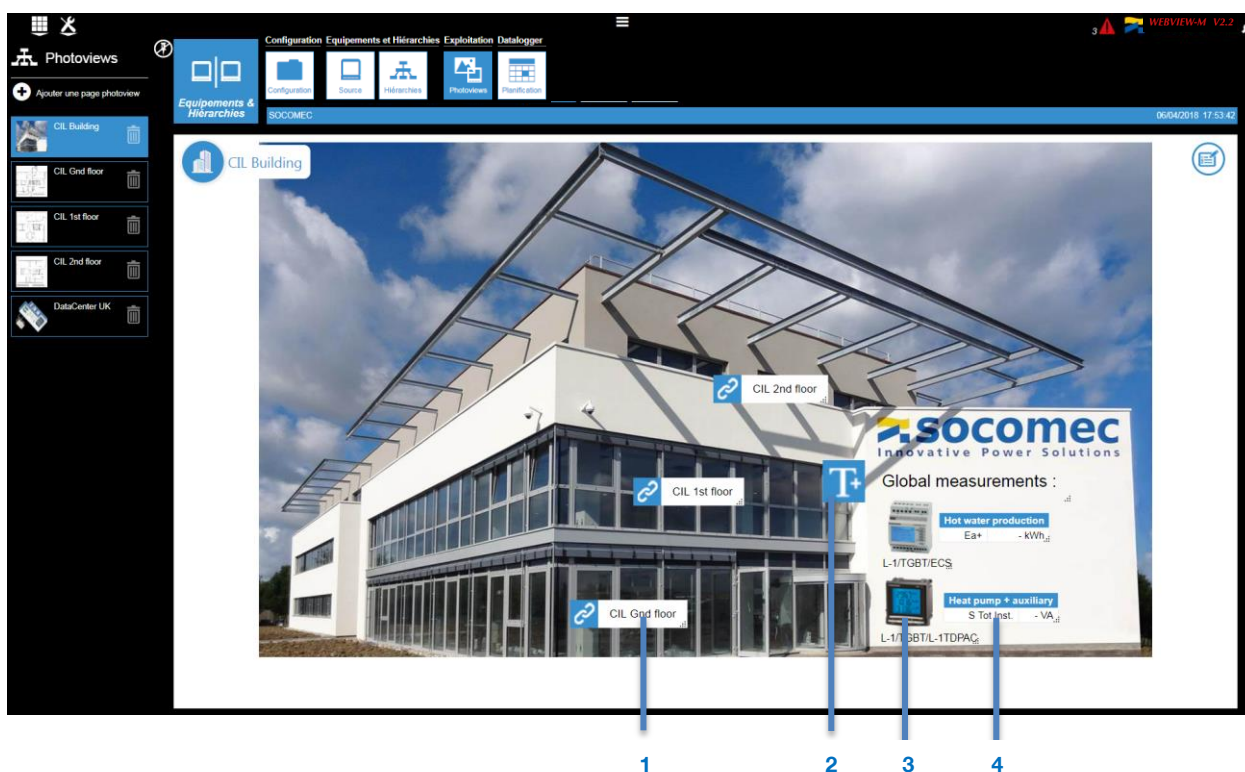
### 8.6.1. Rules on creating a Photoview page

Photoview pages can include the following elements:

- Measurement: table summarising the values the Administrator wants to display on the Photoview page
- Text: text field to add comments, titles or any notes the Administrator deems helpful
- Devices: Shows images of SOCOMEC devices on the Photoview page. Click on a hyperlink to go straight to the product monitoring menus (Monitoring)
- Link: creates links between your Photoview pages. You can recreate a multi-level hierarchy of Photoview pages: Campus - Buildings - Floors - Corridors

The rules for creating Photoview pages are as follows:

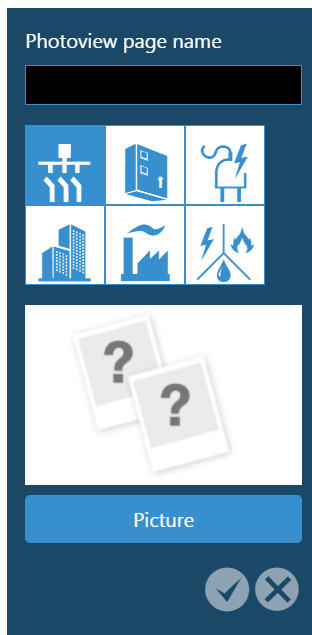
- One Photoview page can contain all the collected values, regardless of the utility type and associated usages
- You can create 21 Photoview pages
- You can link Photoview pages with hypertext links



1. Link
2. Text
3. Device
4. Measurement

## 1. Creating a Photoview page.

To create a Photoview page, the Administrator chooses a name for the page, selects a symbol to represent it and opens the selection window for the background picture.



The form is titled "Photoview page name" and features a text input field. Below the input field is a 2x3 grid of six blue icons representing different industrial or power-related symbols. Underneath the grid is a placeholder image showing two overlapping photo frames with question marks. At the bottom of the form is a blue button labeled "Picture" and two circular icons, one with a checkmark and one with an 'X'.

## 2. Selecting the picture

Administrators can upload pictures from their computer, under the following conditions:

- The size of the image must not exceed 10 485 760 bytes
- The resolution of the image must not exceed 1920 (w) x 1080 (h).



### 3. Creating the Photoview page

To build the Photoview page, the Administrator can use the various objects in the Toolbox in the left pane (measurement, text, devices and link). As an Administrator, just drag & drop objects to the Photoview page.

- Measurement

When a Measurement object is added to the background picture, the following window appears. The Administrator can:

- Select the device
- Check parameters to display
- Name the measurement table

U/I	Inst.	Avg	Power	Inst.	Avg	Energy	Total	Partial
V1	<input type="checkbox"/>	<input type="checkbox"/>	PF1	<input type="checkbox"/>	<input type="checkbox"/>	Ea+	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V2	<input type="checkbox"/>	<input type="checkbox"/>	PF2	<input type="checkbox"/>	<input type="checkbox"/>	Ea-	<input type="checkbox"/>	<input type="checkbox"/>
V3	<input type="checkbox"/>	<input type="checkbox"/>	PF3	<input type="checkbox"/>	<input type="checkbox"/>	Er+	<input type="checkbox"/>	<input type="checkbox"/>
U12	<input type="checkbox"/>	<input type="checkbox"/>	PF Tot.	<input type="checkbox"/>	<input type="checkbox"/>			
U23	<input type="checkbox"/>	<input type="checkbox"/>	P1	<input type="checkbox"/>	<input type="checkbox"/>			
U31	<input type="checkbox"/>	<input type="checkbox"/>	P2	<input type="checkbox"/>	<input type="checkbox"/>			
I1	<input type="checkbox"/>	<input type="checkbox"/>	P3	<input type="checkbox"/>	<input type="checkbox"/>			
I2	<input type="checkbox"/>	<input type="checkbox"/>	P Tot.	<input type="checkbox"/>	<input type="checkbox"/>			
I3	<input type="checkbox"/>	<input type="checkbox"/>	Q1	<input type="checkbox"/>	<input type="checkbox"/>			
In	<input type="checkbox"/>	<input type="checkbox"/>	Q2	<input type="checkbox"/>	<input type="checkbox"/>			
			Q3	<input type="checkbox"/>	<input type="checkbox"/>			

- Text

When a Text object is added to the background picture, the following window appears. The Administrator can:

- Enter the text to display
- Choose the font and background colour

Text

Color

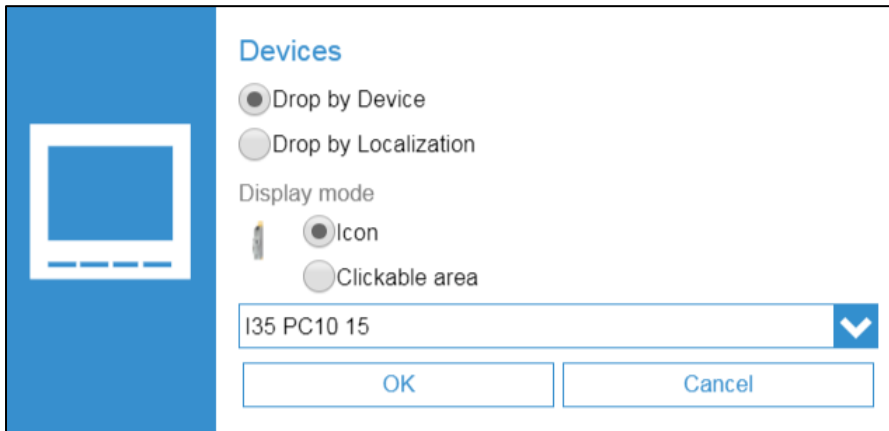
Background color

- Devices

When a Device object is added to the background picture, the following window pops up. The Administrator can:

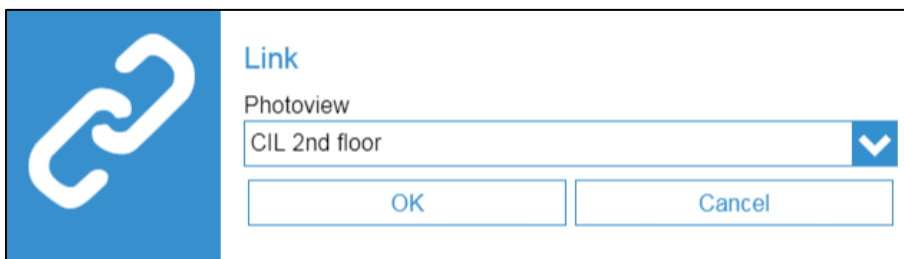
- Add a device ("Drop by product") or all the devices from one location ("Drop by location")
- Choose a display mode: the icon of the selected device or just a clickable area, which can be adjusted and positioned anywhere onto the background picture.

All icons and clickable areas contain a hypertext link to the monitoring page for that device (Monitoring).



- Link

When a Link object is added to the background picture, the following window appears. The Administrator can create a link to another Photoview page.



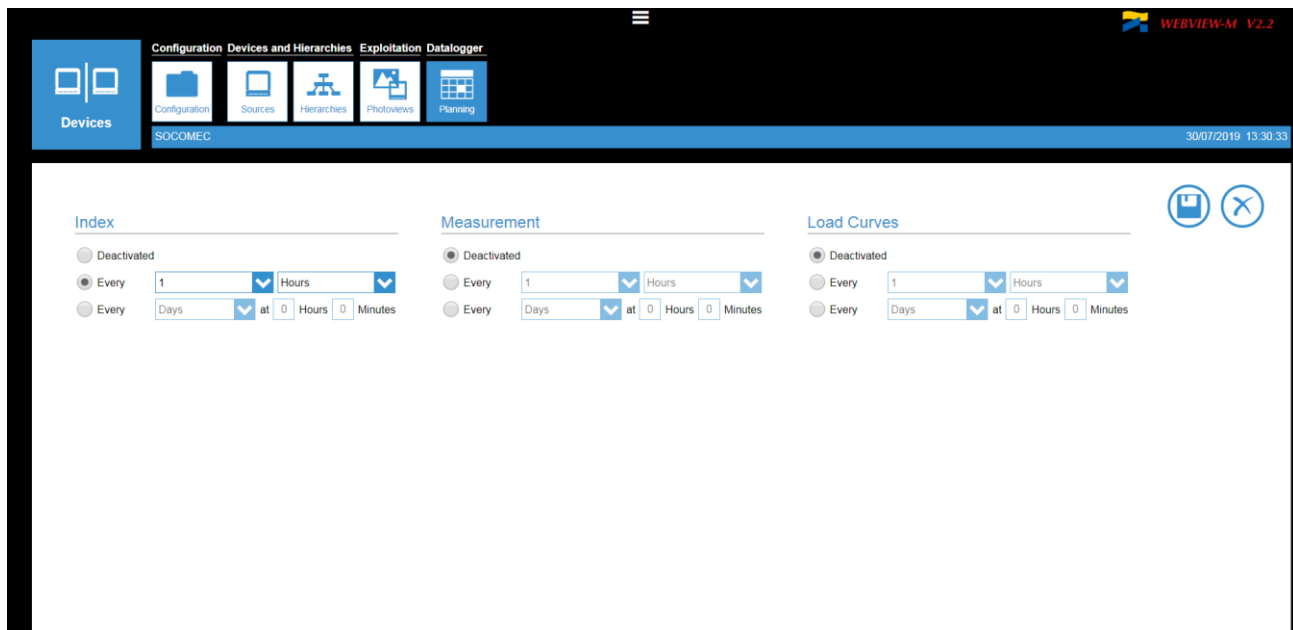
Creating links is useful if you have a main switchboard equipped with meters or power monitoring devices, that feeds several subpanels also equipped with meters.



## 8.7. Datalogger

The Datalogger section is used to collect, store and export data to a third-party server.

Under the "Devices" menu, the "Planning" tab allows you to set the export schedule: the type of data and the export frequency for each data type:



## 9. Appendices

### 9.1. Appendix 1: Example of a data file exported to a remote server – CSV format

Device name	IP Address	Modbus Address	Begin date	End date
I35_102	0.0.0.0	102	2000-01-01T00:00:00	2018-09-26T09:55:00
Load Name	Security lighting Circulation	Security lighting Circulation	Security lighting Storage Metrol	Security lighting Storage Metrol
Usage	Heating	Heating	Heating	Heating
Nature	Elec	Elec	Elec	Elec
Measured value	EA+	EA-	EA+	EA-
Unit	Wh	Wh	Wh	Wh
Scale	1.0000000	1.0000000	1.0000000	1.0000000
2018-09-26T09:50:00	0	0	0	0
2018-09-26T09:40:00	0	0	0	0
2018-09-26T09:30:00	0	0	0	0
2018-09-26T09:20:00	0	0	0	0
2018-09-26T09:10:00	0	0	0	0
2018-09-26T09:00:00	0	0	0	0
2018-09-26T08:50:00	0	0	0	0
2018-09-26T08:40:00	0	0	0	0
2018-09-26T08:30:00	0	0	0	0
2018-09-26T08:20:00	0	0	0	0
2018-09-26T08:10:00	0	0	0	0
2018-09-26T08:00:00	0	0	0	0
2018-09-26T07:50:00	0	0	0	0
2018-09-26T07:40:00	0	0	0	0
2018-09-26T07:30:00	0	0	0	0
2018-09-26T07:20:00	0	0	0	0
2018-09-26T07:10:00	0	0	0	0
2018-09-26T07:00:00	0	0	0	0
2018-09-26T06:50:00	0	0	0	0
2018-09-26T06:40:00	0	0	0	0
2018-09-26T06:30:00	0	0	0	0
2018-09-26T06:20:00	0	0	0	0
2018-09-26T06:10:00	0	0	0	0
2018-09-26T06:00:00	0	0	0	0
2018-09-26T05:50:00	0	0	0	0
2018-09-26T05:40:00	0	0	0	0
2018-09-26T05:30:00	0	0	0	0
2018-09-26T05:20:00	0	0	0	0
2018-09-26T05:10:00	0	0	0	0
2018-09-26T05:00:00	0	0	0	0
2018-09-26T04:50:00	0	0	0	0
2018-09-26T04:40:00	0	0	0	0
2018-09-26T04:30:00	0	0	0	0
2018-09-26T04:20:00	0	0	0	0
2018-09-26T04:10:00	0	0	0	0
2018-09-26T04:00:00	0	0	0	0
2018-09-26T03:50:00	0	0	0	0
2018-09-26T03:40:00	0	0	0	0
2018-09-26T03:30:00	0	0	0	0
2018-09-26T03:20:00	0	0	0	0
2018-09-26T03:10:00	0	0	0	0
2018-09-26T03:00:00	0	0	0	0

## 9.2. Appendix 2: Example of a data file published to the remote server – EMS format

In EMS format, the exported files are named as follows:

Site name\_Server name\_Device name\_Data type\_Date\_Time.csv

**Example:** If a file is exported with the name `socomec_GTWDEF_I35_LoadCurve_2017-08-15_20-00-00.csv`, that is, a file exported on 15 August 2017, at 8pm, it contains load curve data from a device called "I35" connected to a D-70/D-75 gateway or display whose server name is 8AD4A2 and the site name is "socomec".

Reading the file:

socomec_GTWDEF_I-35@4_Avg_2019-01-18_15-20-06.csv.txt												
	A	B	C	D	E	F	G	H	I	J	K	L
1	Data Type	TimeZone	Datation	Transfer Cycle (sec)	Pooling Tir Version		Site name	Server name				
2	Avg	UTC	Local	600	N/A		1 socomec	GTWDEF				
3												
4	Index Key	Key	Type	Name	Fluid	Use	Coef	Unit	Path	Device Id	Index	Data Id
5	0	socomec GTWDEF 14 1 ANA 100006	ANA	THD I1 of PC 1-2-3 of I-35@4	ELEC	Indoor Lighting	100	%	/	14	1	100006
6	1	socomec GTWDEF 14 1 ANA 100007	ANA	THD I2 of PC 1-2-3 of I-35@4	ELEC	Indoor Lighting	100	%	/	14	1	100007
7	2	socomec GTWDEF 14 1 ANA 100008	ANA	THD I3 of PC 1-2-3 of I-35@4	ELEC	Indoor Lighting	100	%	/	14	1	100008
8	3	socomec GTWDEF 14 1 ANA 10023	ANA	I1 AVG of PC 1-2-3 of I-35@4	ELEC	Indoor Lighting	1000	A	/	14	1	10023
9	4	socomec GTWDEF 14 1 ANA 10024	ANA	I2 AVG of PC 1-2-3 of I-35@4	ELEC	Indoor Lighting	1000	A	/	14	1	10024
10	5	socomec GTWDEF 14 1 ANA 10025	ANA	I3 AVG of PC 1-2-3 of I-35@4	ELEC	Indoor Lighting	1000	A	/	14	1	10025
11												
12	Index Key	Date	Value	Quality								
13	0	2019-01-18T15:14:00	234	192								
14	0	2019-01-18T15:13:00	237	192								
15	0	2019-01-18T15:12:00	190	192								
16	0	2019-01-18T15:11:00	201	192								
17	0	2019-01-18T15:10:00	200	192								
18	0	2019-01-18T15:09:00	198	192								
19	0	2019-01-18T15:08:00	210	192								
20	0	2019-01-18T15:07:00	231	192								
21	0	2019-01-18T15:06:00	211	192								
22	0	2019-01-18T15:05:00	199	192								
23	1	2019-01-18T15:14:00	20001	192								
24	1	2019-01-18T15:13:00	21605	192								
25	1	2019-01-18T15:12:00	19804	192								
26	1	2019-01-18T15:11:00	20901	192								

The csv file is split into two parts:

- A header section shown in red (1). It contains a unique ID for each variable exported, based on the multiple parameters including the site name and the server name, the data type, the data ID, the device ID, to provide a unique identification for each variable exported.
- The green section (2) contains logged and timestamped data. Each line is identified by a simplified key, an Index Key, which returns to the unique key in cells B5 to B10 in the image below.

The final data of cells C13 to C26 comes from the matching coefficient (cells G5 to G10) and the matching unit (cells H5 to H10).

**Example for line 13 of the previous image:**

The THD I1 of the circuit PC1-2-3 of the module I-35@4 is the same as 2.34% on 18 January 2019, at 3.14 pm.



When integrating into a third-party energy monitoring software, remember to **always use the unique ID** from column B in the header section (1) as the import code and not just use the simplified code from column A in section (2).

If multiple gateways and/or displays are used and exported to the same remote server, they cannot be separated with the simplified code and you may lose data.

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