CARLO GAVAZZI
Automation Components

CARLO GAVAZZI

UWP 4.0 web app

User manual
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Contents

Introduction 7

General description ... 8

System architecture ... 9

Main features ... 10

Compatible systems (M2M) ... 11

Installation and first access 12

How to access the web app ... 13

Login page ... 14

Installation ... 15

Home page 16

How to set the home page ... 17

Home page elements ... 18

Main menu 19

How to access the main menu ... 20

Main menu options ... 21

Settings menu 23

Settings menu ... 24

Services (Automation server) 25

How to access the Services page ... 26

Service pages ... 27
- Data push service ... 28
- Azure IoT Hub service ... 30
- AWS IoT service ... 31
- MAIA Cloud service ... 32
- UWP secure bridge function ... 33

Things to know ... 34
- Data push service ... 35
- Azure IoT Hub service ... 36
- AWS IoT service ... 37
- MAIA Cloud service ... 38
- UWP secure bridge function ... 39

System settings 40

How to access the System settings ... 41

System settings tabs **42**

How to set the password recovery **46**

Accounts and policies 48

Accounts and policies - main page **49**
Tabs to create an account 50

Types of user **51**

How to create an account **53**

Name settings page 54

Name settings page **55**

How to rename items **56**

Dashboards 57

How to access a custom dashboard **58**

How to access a function dashboard **59**

Dashboards elements **60**
Common elements 61
Widget dashboard 62
Custom chart dashboard 63
Energy summary dashboard 64
Chart template dashboard 66

Things to know **67**
What is a dashboard 68
Custom dashboard 69
Function dashboard 70

How to **71**
How to create a custom dashboard 72
How to manage a chart template 73

Widgets 74

Widgets common elements **75**

Things to know **77**
What is a widget 78
Types of widget 79

Procedures **81**
Create a widget 82
Create a chart 83
Remove a widget 87
Move a widget to another page 88
Copy a widget 89
Schedule an event 90
Manage the widget settings 91

Functions 92

What is a function **93**

Types of function **94**

Descriptions of the functions **96**

Function widget elements **100**
- Switch 101
- Counter 102
- Analogue comparator 104
- Multigate 106
- Mathematical 107
- Analogue output 108
- Modbus outputs 110
- Alarm 111
- Counter alarm 113
- Hour counter 116
- Zone intruder alarm 118
- Main intruder alarm 120
- Siren 122
- Timers 124
- Light control modes 128
- Motor 134
- Sequence 137
- Calendar 139
- Smart calendar 141
- Zone temperature 142
- System temperature 144
- Vehicle heating 147
- Astronomical clock 150

Procedures **152**
- Astronomical clock procedures 152
- Switch procedures 152
- Smart calendar procedures 154
- Sequence procedures 155
- Alarm procedures 156
- Comparator procedures 156
- Counter procedures 158
- Vehicle heating procedures 159
- Calendar procedures 160
- Timers procedures 160
- System temperature procedures 160
- Zone temperature procedures 162
- Light procedures 162
- Modbus outputs 164

Alarms page 165

How to access the Alarms page **166**

Alarms page tabs **167**
- Main page 168
- Events log tab 169
- Widgets tab 170
- Alarms log tab 171

Things to know **172**
- What is an alarm 173
- Types of alarm function 174

Reports 175

How to access the report page **176**

Report page tabs **177**
- Main page 178
- Accounts tab 179
- Schedules tab 180
- Templates tab 181
- History tab 182

Things to know **183**
- What is a report 184

Procedures **185**
- Create an FTP/FTPS account 186
- Create an SMTP account 187
- Create an SFTP account 188
- Schedule a report 189
- Create a template 190
- Re-generate a report 192

Search function 193

How to access the search menu **194**

Search benefits **195**

How to search a function **196**

Introduction

Content

This chapter includes the following sections:

General description 8
System architecture 9
Main features 10
Compatible systems (M2M) 11

General description

UWP 4.0 is a monitoring gateway and controller that allows to monitor and control installations where Energy Efficiency Management and Building Automation functions are needed.

The UWP 4.0 system:

- monitors and controls connected devices via its local bus management functions;
- includes a web app with a powerful and intuitive user interface that displays custom dashboards and function widgets;
- interacts with local devices and remote systems.

The UWP 4.0 embedded automation server (see "Services (Automation server)" on page 25) allows you to exchange data locally or remotely via standard Internet protocols.

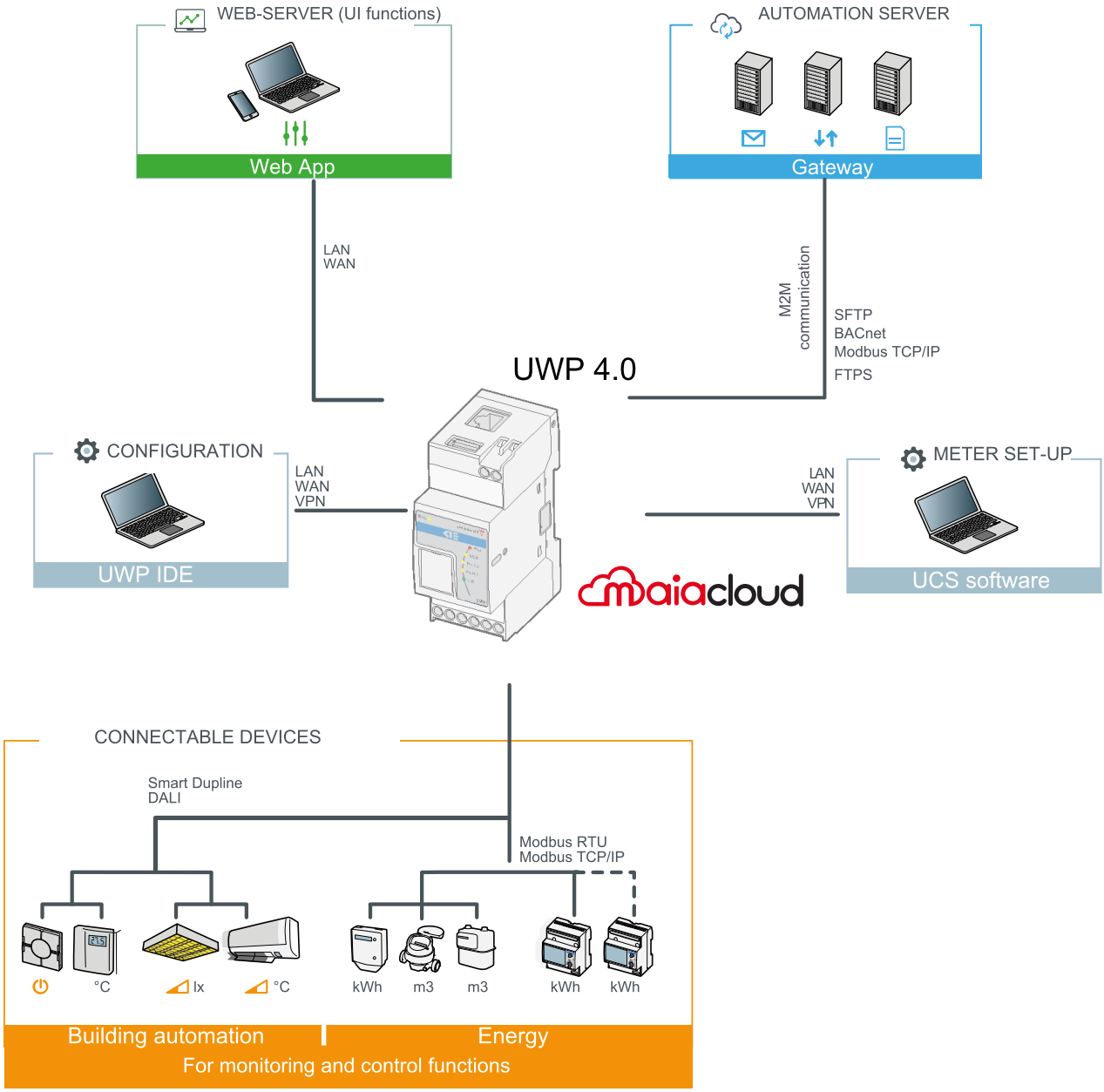
The UWP 4.0 web app is the UWP 4.0 web interface accessible through standard browsers such as Google Chrome, Mozilla Firefox or Microsoft Edge, both from mobile and desktop devices.

Thanks to widgets that you can add to predefined or custom dashboards, the UWP 4.0 web app allows you to:

- view and export collected data;
- control the automation functions;
- define specific settings.
- manage reports and alarms.

Thanks to MAIA Cloud, you can access the UWP 4.0 web app through a secure VPN (Virtual Private Network): you do not need to worry about IP address changes and firewalls. You can always access your device, according to your security policies so navigating the UWP 4.0 web-interface the same way you do it locally.

System architecture



Main features

The UWP 4.0 web app allows you to perform the following tasks:

- view collected data as real time values or charts (such as real-time, energy summary or history charts);
- generate data and events reports;
- manage and adjust the function parameters (e.g. to modify temperature set points);
- send commands (e.g. switching ON/OFF or select scenarios);
- configure Data Push Services to FTP/SFTP/FTPS servers or Em^2-Server (Carlo Gavazzi);
- configure MQTT link to IoT Hubs (Microsoft Azure, Amazon AWS).
- manage and acknowledge alarms
- manage users' accounts and policies
- learn the main tasks by using the embedded tutorial

Compatible systems (M2M)

The UWP 4.0 available systems are the following:

- Em^2-Server (Carlo Gavazzi);
- FTP/SFTP/FTPS servers;
- Microsoft Azure IoT Hub service systems.
- Amazon AWS IoT service
- Modbus gateway with TCP/RTU devices
- Integration into BMS systems via BACnet IP and Modbus TCP/IP
- UWP secure bridge function

Installation and first access

Content

This chapter includes the following sections:

How to access the web app 13
Login page 14
Installation 15

How to access the web app

1. From any standard web browser, type the web app IP address.
2. In the access area, enter valid credentials.
3. Click **Login**.
4. Read and accept the **Terms and Conditions**.

   Notes:

   - *If you do not accept our terms and conditions, you cannot access the Web App.*
   - *The **Terms and Conditions** will appear only at the very first access to the Web App.*
   - *After the login, you are redirected to the **Home page**.*

Login page

Element	Description
	Custom logo. *For further information, see "Settings menu" on page 24.*
Username / Password	Access credentials (required for some types of user). *For further information, see Accounts and policies > Types of user.*
Forgot password	Password recovery. *Note: to recover your password, you must set an SMTP server (go to **System settings > Network tab** and **> "How to set the password recovery" on page 46**).*
Remember me	Keeps user logged in.
Free access	Access without credentials. *For further information, see Accounts and policies > Types of user.*
Terms and Conditions	Use conditions. *Notice: read and accept them to access the web app.*

Installation

For installing the hardware part and for the system commissioning, refer to the **UWP IDE** (configuration software) manual.

Home page

Content

This chapter includes the following sections:

How to set the home page 17
Home page elements 18

How to set the home page

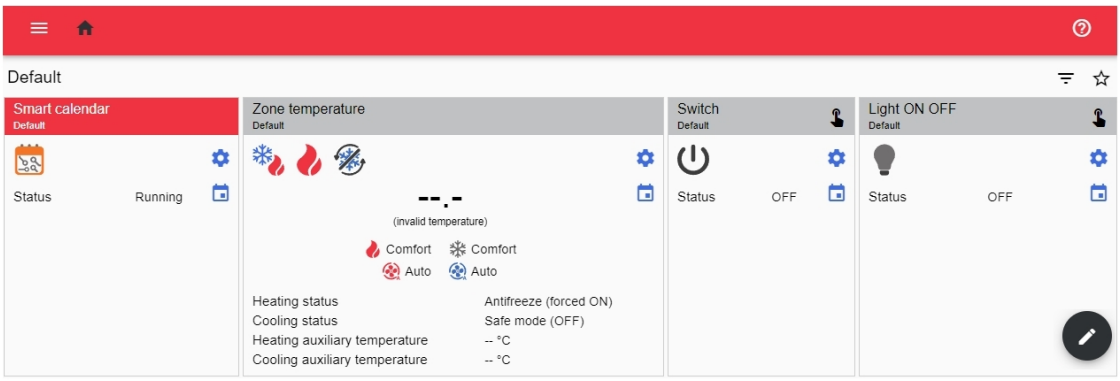
1. From a dashboard, click  to access the editing mode.
2. From the **Edit** toolbar, click ⋮ to open the **Dashboard management** menu.

For further information, see "Dashboards" on page 57.

1. Click **Set as homepage**.
2. Click  to save.

Note: the icon  *will change the colour in the selected **Home page**.*

Home page elements



Area	Description	
Navigation bar	**Icon**	**Function**
		Accesses the Main menu
		When available, goes back to the previous page. *Notice: this option is available only when you are navigating the **Main menu** options. For further information, see Main menu*
		Goes back to the Home page
		When available, shows active alarms and permits accessing the Alarms page.
		Starts the tutorials. You can enable or disable this option from *(Main menu) > > (Settings) > Preferences > Enable tutorial*.
"Dashboards" on page 57	**Element**	**Function**
	`Default`	Dashboard selector.
		Filters the available types of user. When you select a user, this icon appears to directly access the profile page. Select **None** to remove the filter. *For further information, see Types of user.*
		Adds a dashboard to the favourites list. You can add or remove the dashboard to/from the favourites' list, displayed in the navigation bar. *Notes* • *once you have marked a dashboard as a favourite, the relevant icon will appear in the navigation bar* • *if you filter the user, this option disappears.*
		Accesses the editing mode.

Main menu

Content

This chapter includes the following sections:

How to access the main menu 20
Main menu options 21

How to access the main menu

1. From the **Navigation bar**, click ☰ to open the **Main menu**.
2. Select the desired option.

   *Notice: this menu is not available if you choose the **Free access**. For further information, see Types of user.*

Main menu options

Element	Description
	Custom logo. *For further information, see Settings menu .*
⋮	Menu including: **Settings** *Notice: this menu is not available if you choose the **Free access**. For further information, see Types of user.* **Logout**
Heating/Cooling plant	Temperature functions area
Sequences	Function dashboard menu. *Notice: it depends on the configuration made from the UWP IDE. For further information, see the UWP IDE manual.*
• **Alarms** • **Reports** • **Search**	Widget and data management.
Services	**Services (automation server)** menu. *For further information, see Services (automation server).*
System information	Shows information about the system (**System info** tab): • Serial number, Mac address and Firmware version (**Information**tile); • UWP date / time and time zone (**Date and time*** tile); • Connected automation bus subnet, Modbus RTU COM1/COM2 devices, TCP devices, Total processed signals (**Signals** tile); • Ethernet and Modem Status (**Connection status** tile). **Note: these fields can be changed by means of the Settings menu .* It also shows the list of the online users (**Online users** tab) and the relevant details. From this tab, you can access the account details ( ) or close its session ( ).
System settings	*For further information, see System settings*
Accounts and policies	You can add or manage accounts and the relevant user's roles. *For further information, see Accounts and policies*
Name Settings	You can manage the web app function names. *For further information, see "Name settings page" on page 54*

Element	Description
Online guide	Opens the online version of the **web app user manual**.
Software legal notices	• **Abstract**, that contains proprietary notices for the Third Party Programs and the licenses for the Third Party Programs, where applicable. • **UWP 4.0 firmware** license • **UWP 4.0 web app** license

Settings menu

Content

This section includes the following sections:

Settings menu 24

Settings menu

The **Settings menu** includes two tabs: **Account** and **Preferences**.

The **Account** tab includes user's information such as:

- **Name**
- **Surname**
- **Email**
- **Username/password.**

From the **Preferences** tab you can:

- change the Web App **Language**
- change the **Font** and its size (**Zoom**)
- **Show** the project **title** and **section**
- **Show the real-time timestamp**
- **Enable the tutorial**.

Services (Automation server)

Content

This section includes the following sections:

How to access the Services page 26
Service pages 27
Things to know 34

How to access the Services page

1. From the **Navigation bar**, click  to open the **Main menu**.
2. Select **Services**.

Service pages

Content

This section includes the following topics:

Data push service 28
Azure IoT Hub service 30
AWS IoT service 31
MAIA Cloud service 32
UWP secure bridge function 33

Data push service

<table>
<tr><th>Tile</th><th>Description</th></tr>
<tr><td>  </td><td>UWP 4.0 installation position.</td></tr>
<tr><td>Service configuration</td><td>
<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Start date</td><td>Sending data date/time
  = Apply</td></tr>
<tr><td>Host address</td><td>Em²-Server address
  = Connection test</td></tr>
<tr><td>Upload interval</td><td>Data pushing interval expressed in minutes.</td></tr>
<tr><td>Command verify interval</td><td>Indicates how often the UWP 4.0 verifies the presence in the Em²-Server of commands to execute.</td></tr>
<tr><td>Service</td><td>Disables/Enables the service</td></tr>
</table>
</td></tr>
<tr><td>Information</td><td>Information concerning the service.
<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Status</td><td>Service status:
  Active /  Inactive</td></tr>
<tr><td>Last data transmission</td><td>Date/time of the last data transmission.</td></tr>
<tr><td>Last sample sent</td><td>Date/time of the last sent sample.</td></tr>
<tr><td>Show logs - OK</td><td>List of logs successfully loaded.</td></tr>
<tr><td>Show logs - Errors</td><td>List of log errors.</td></tr>
<tr><td>Server version</td><td>Installed software version on Em²-Server.</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Tile</th><th>Description</th></tr>
<tr><td>Commands</td><td>Configuration manual commands.
<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Partial configuration</td><td>Sends the last changes of the device configurations.</td></tr>
<tr><td>Complete configuration</td><td>Sends all the devices configurations.</td></tr>
<tr><td>Commands request</td><td>Subscribes to the commands published by the connected Em^2-Server.</td></tr>
</table></td></tr>
<tr><td>  </td><td>Saves the configuration.</td></tr>
</table>

Azure IoT Hub service

<table>
<tr><th>Tile</th><th>Description</th></tr>
<tr><td>Service configuration</td><td>The options depend on the enabling of the DPS (Enable DPS slider). See the table below:
<table>
<tr><th>Options available</th><th>DPS ON</th><th>DPS OFF</th></tr>
<tr><td>Scope ID</td><td rowspan="3">To be filled in.</td><td rowspan="3">-</td></tr>
<tr><td>Registration ID</td></tr>
<tr><td>Primary key</td></tr>
<tr><td>Connection string</td><td>Automatically filled in.</td><td>For device registration/un-registration.
= Connection test (available only if you are not using a DPS).</td></tr>
<tr><td>Start date</td><td colspan="2">Sending data date/time
= Apply (available only if you are not using a DPS).</td></tr>
<tr><td>Upload interval</td><td colspan="2">Data pushing interval expressed in minutes.</td></tr>
<tr><td>Service</td><td colspan="2">Disables/Enables the Azure IoT Hub service on your UWP 4.0.</td></tr>
<tr><td>Reprovisioning</td><td>Allows you to redo the device provisioning procedure.</td><td>-</td></tr>
</table></td></tr>
<tr><td>Information</td><td>Information concerning the service.
<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Status</td><td>Service status:
Active / Inactive</td></tr>
<tr><td>Last data transmission</td><td>Date/time of the last data transmission.</td></tr>
<tr><td>Show logs - OK</td><td>List of logs successfully loaded.</td></tr>
<tr><td>Show logs - Errors</td><td>List of log errors.</td></tr>
</table></td></tr>
<tr><td>Selected devices</td><td>The data are collected from the Selected devices.</td></tr>
<tr><td></td><td>Saves the configuration.</td></tr>
</table>

For further information, see Azure IoT Hub concepts overview and How to set up a Microsoft-Azure IoT-based system with UWP 4.0

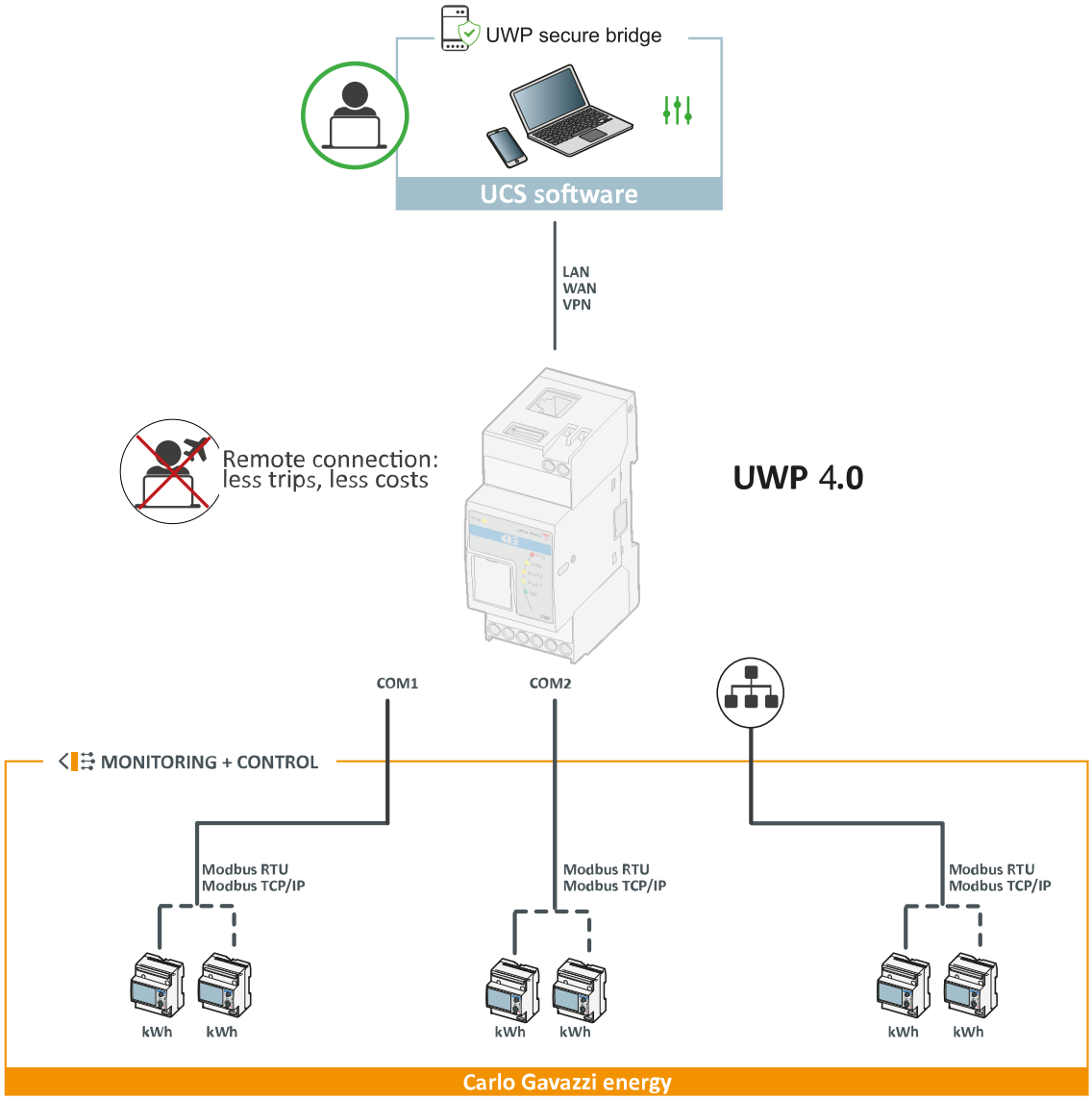
AWS IoT service

<table>
<tr><th>Tile</th><th>Description</th></tr>
<tr><td>Service configuration</td><td>
<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Connection string</td><td>For device registration/un-registration.
⇄ = Connection test
Note: Available only when the service is enabled.</td></tr>
<tr><td>Client ID</td><td>Client ID</td></tr>
<tr><td>Topic</td><td>Defined by the user</td></tr>
<tr><td>Security certificates</td><td>Uploading of the Device Certificate and the Private Key generated using AWS online tools.
Notice: Both certificates have to be uploaded.</td></tr>
<tr><td>Start date</td><td>Sending data date/time
⏱ = Apply</td></tr>
<tr><td>Upload interval</td><td>Data pushing interval expressed in minutes.</td></tr>
<tr><td>Service</td><td>Disables/Enables the service</td></tr>
</table>
</td></tr>
<tr><td>Information</td><td>Information concerning the service.
<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Status</td><td>Service status:
● Active / ○ Inactive</td></tr>
<tr><td>Last data transmission</td><td>Date/time of the last data transmission.</td></tr>
<tr><td>Show logs - OK</td><td>List of logs successfully loaded.</td></tr>
<tr><td>Show logs - Errors</td><td>List of log errors.</td></tr>
</table>
</td></tr>
<tr><td>Selected devices</td><td>The data are collected from the Selected devices.</td></tr>
<tr><td>💾</td><td>Saves the configuration.</td></tr>
</table>

MAIA Cloud service

Tile	Description
Service configuration	Disables/Enables the service
	Activation code. It permits activating the device in MAIA Cloud system. *For further information about MAIA Cloud, read the relevant manual.*
Information	Service status: Active / Inactive
	Saves the configuration.

UWP secure bridge function



Things to know

Content

This section includes the following topics:

Data push service 35
Azure IoT Hub service 36
AWS IoT service 37
MAIA Cloud service 38
UWP secure bridge function 39

Data push service

The Data push service allows you to send data from the UWP 4.0 to the Em^2-Server.

Azure IoT Hub service

UWP 4.0 is Microsoft Azure Certified. Thanks to data available on Microsoft Azure IoT, you can leverage the powerful Azure IoT tools for:

- Integrating other data source data;
- Sharing information with other systems;
- Using the best Business Intelligence tools to dig into data.

For further information, see

Azure IoT Hub concepts overview and *How to set up a Microsoft-Azure IoT-based system with UWP 4.0*

AWS IoT service

UWP 4.0 is compatible with Amazon AWS IoT. Thanks to data available on Amazon AWS, you can leverage the powerful Amazon tools for:

- Integrating other data source data;
- Sharing information with other systems;
- Using the best Business Intelligence tools to dig into data.

For further information, see www.productselection.net/MANUALS/UK/UWP4.0_azure-aws.pdf

MAIA Cloud service

The **MAIA Cloud** service is a remote access service that Carlo Gavazzi Controls activates to provide remote assistance.

UWP secure bridge function

The **UWP secure bridge** function permits establishing a secure connection through LAN or Internet network between the UCS software and Carlo Gavazzi Modbus meters connected to UWP 4.0 via RS485 or LAN network.

This way you can perform the following tasks remotely:

- configure a wired device via UCS without disconnecting UWP 4.0;
- check the proper functioning of the devices, the real time measures, the status of alarms and the inputs/outputs
- modify or correct the configuration parameters, in case of measures anomalies or of project structure changes.

System settings

Content

This section includes the following sections:

How to access the System settings 41
System settings tabs 42
How to set the password recovery 46

How to access the System settings

1. From the **Navigation bar**, click ☰ to open the **Main menu**.
2. Select **System settings**.

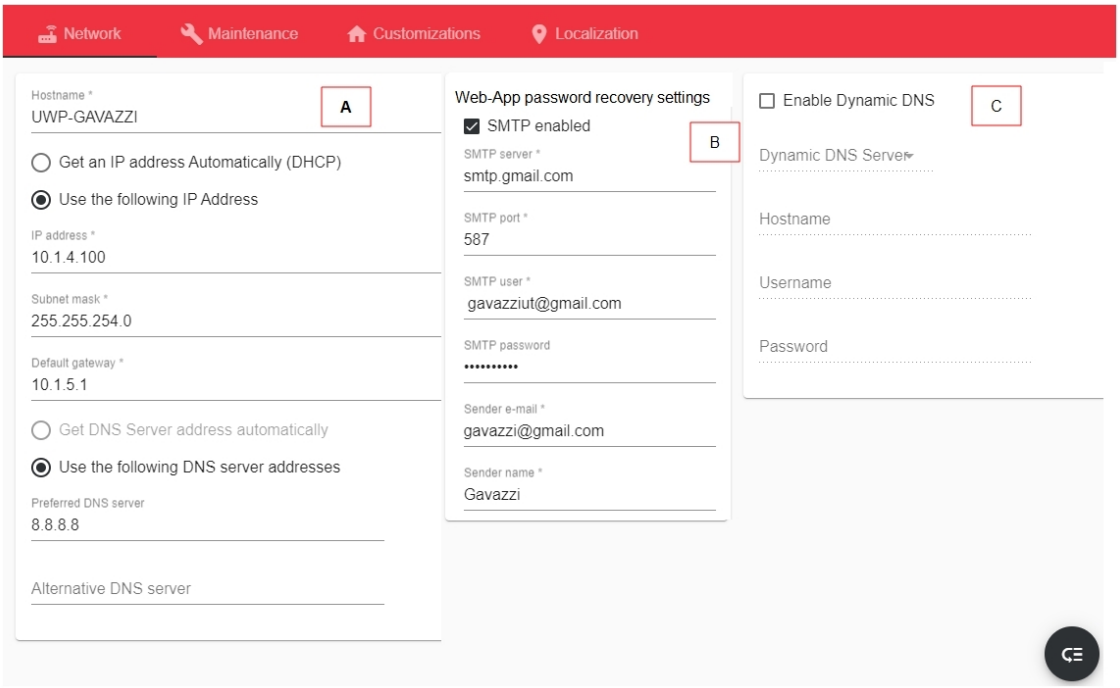
System settings tabs

The **System settings** menu has the following four tabs:

- **Network**
- **Maintenance**
- **Customizations**
- **Localizations**

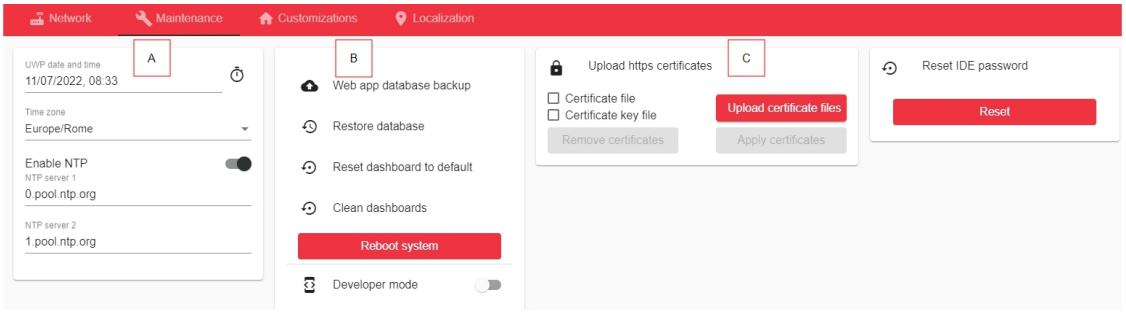
All these tabs have in common the menu that permits to save ( ) or restore ( ) configurations.

Network tab



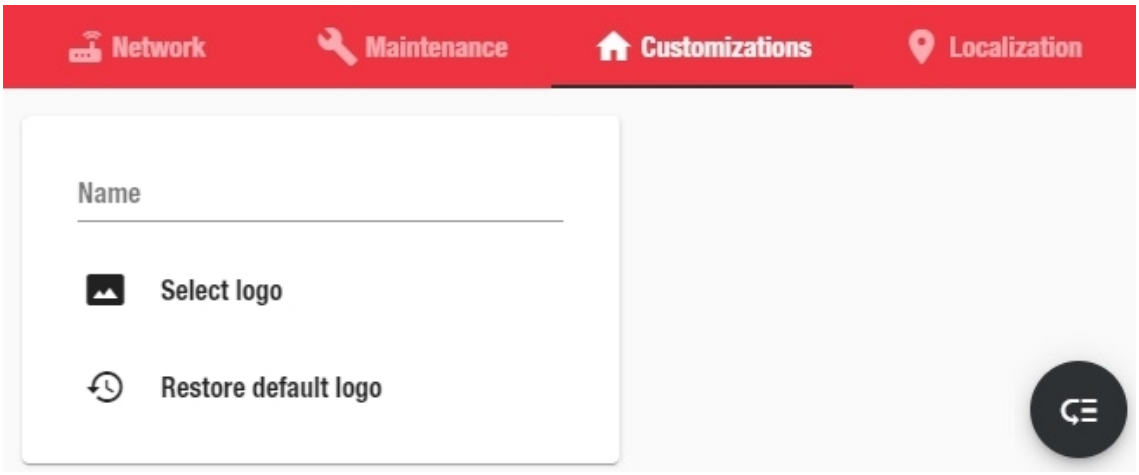
<table>
<tr><th>Area</th><th>Description</th></tr>
<tr><td>A</td><td>
<table>
<tr><th>Element</th><th>Function</th></tr>
<tr><td>UWP Name</td><td>You can change the UWP name.</td></tr>
<tr><td>Get an IP address Automatically (DHCP)</td><td>You can select to automatically assign an IP address.</td></tr>
<tr><td>Use the following IP Address</td><td>You can complete the following fields to assign a static IP address:
IP address
Subnet mask
Default gateway.</td></tr>
<tr><td>Get DNS Server address automatically</td><td>You can select it to automatically assign a DNS Server address.
Note: this option is available only if you choose the DHCP.</td></tr>
<tr><td>Use the following DNS Server addresses</td><td>You can complete the following fields to assign a DNS Server address:
Preferred DNS server
Alternative DNS server.</td></tr>
</table>
Notice: The field marked with (*) is mandatory.
</td></tr>
<tr><td>B</td><td>Web-App password recovery settings: you MUST set these parameters in order to be able to reset your password.
If you check the SMTP enabled field, you enable the following options:
SMTP server
SMTP port
SMTP username
SMTP password
Sender email
Sender name
Important note: these fields are mandatory and necessary for the password reset request.
See "How to set the password recovery" on page 46</td></tr>
<tr><td>C</td><td>If you check the Enable Dynamic DNS field, you enable the following options:
Dynamic Server DNS
Hostname
Username
Password
Notice: The field marked with (*) is mandatory.</td></tr>
</table>

Maintenance tab



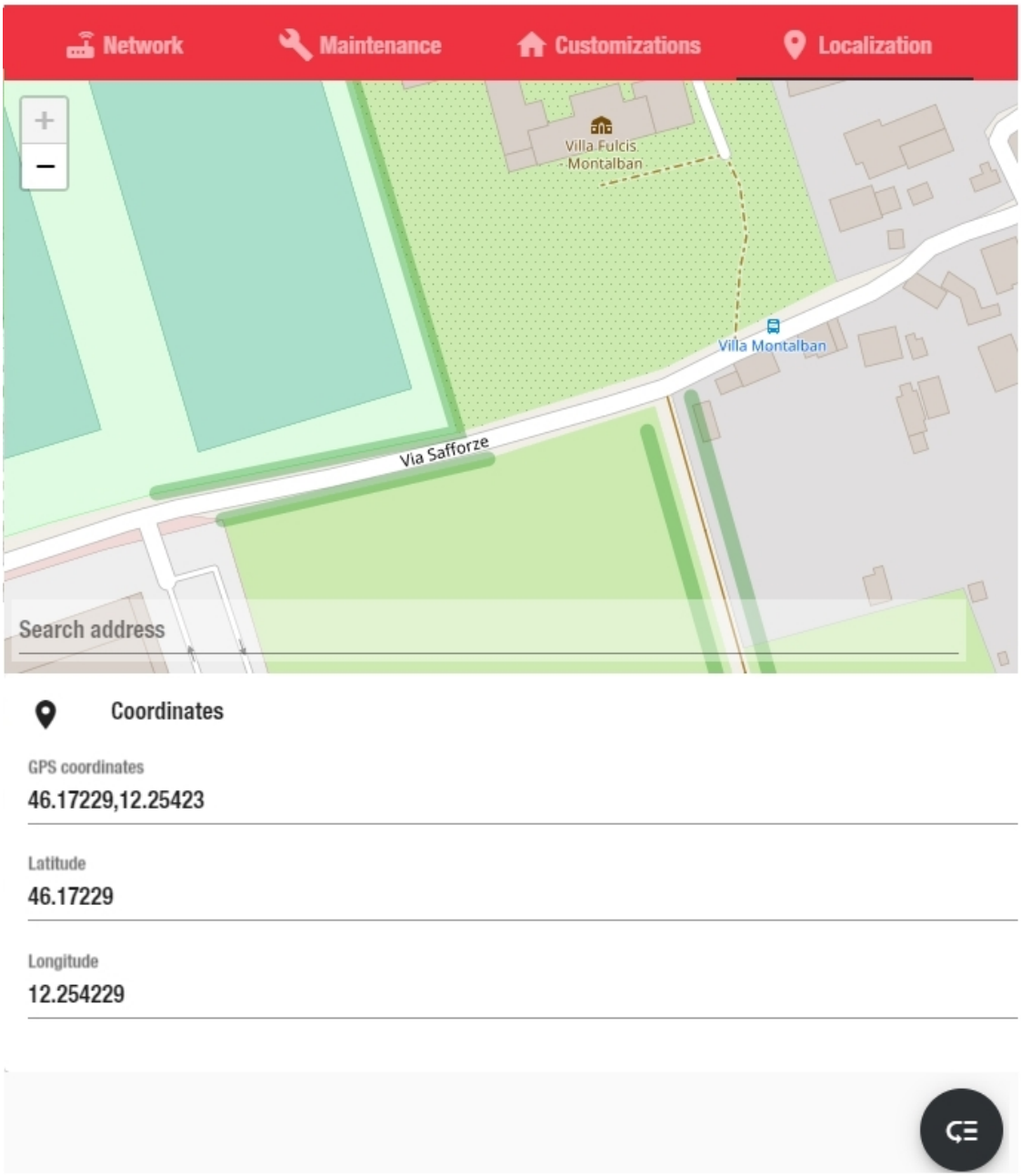
Area	Description
A	From this area you can: • Change the **UWP date and time**; • Select a **Time zone**; • **Enable** Network Time Protocol (**NTP**) for clock synchronization. For this function, you can indicate the server address (server 1 or server 2).
B	From this area you can: • save the Web App configuration as a .zip file (**Web App Database backup**) • load the Web App configuration from a previously saved file (**Restore database**) • restore the UWP IDE configured locations, displayed as dashboards in the Web App, that contain functions, displayed as widgets in the Web App (**Reset default Web App**) • **Clean the Web App** • **Reboot system** • Switch to **Developer mode** (to see the labels keys). **Note: This field is available only for the Admin user.*
C	**Upload https certificates**

Customizations tab



From this tab you can customize you web app interface (**Name** and **logo)**.

Localizations tab



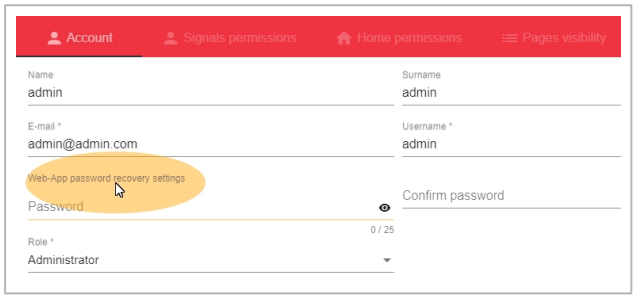
From this tab, you can enter the **Coordinates** of your installed devices.

How to set the password recovery

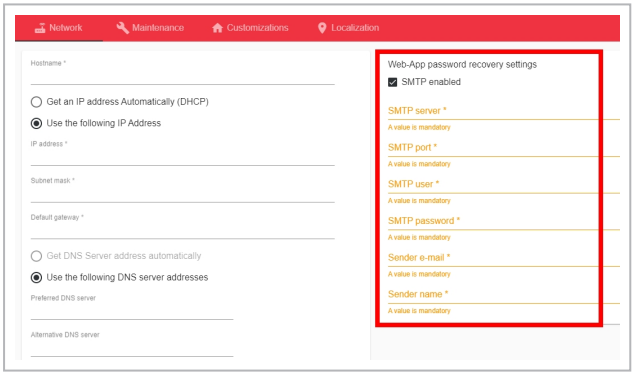
1. Go to ***Navigation bar*** > ☰ > ***Accounts and policies***
2. Access the default administrator account

   You will find a fake e-mail address (admin@admin.com) that you are recommended to change with your e-mail.

   This is important in case you forget the web app password because you have to use this e-mail address to receive a "web app password reset" link.
3. Change the default email and go to the **Web app password recovery settings** (see the picture below).



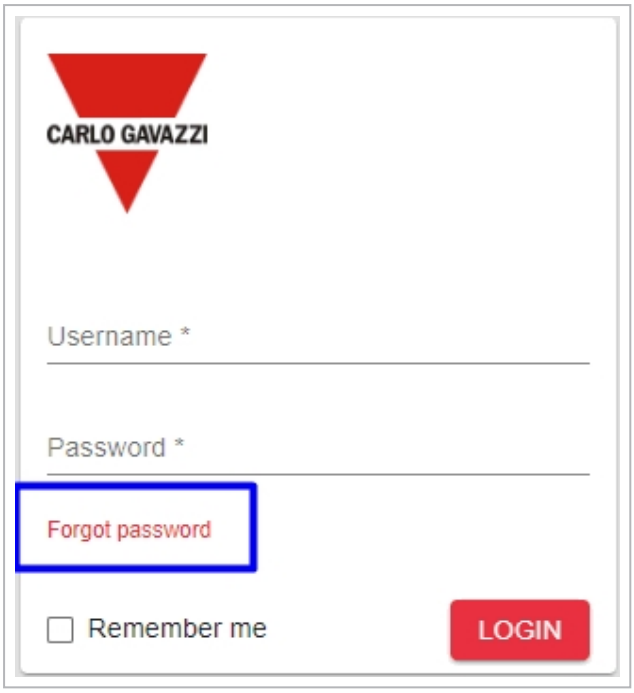
4. Clicking it readdresses you to the **System settings**: there, you can enable and fill in the **SMTP service** parameters (see the picture below).



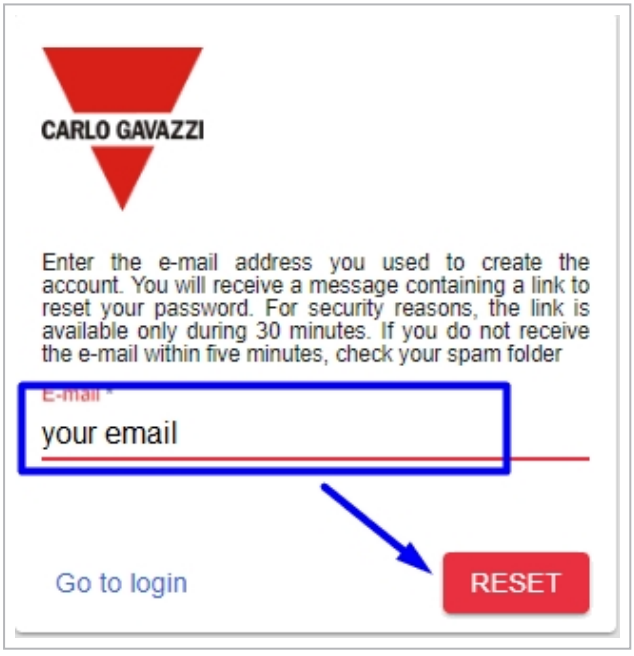
Note: this SMTP server is only used for the Web-App password recovery.

Use case: reset a password

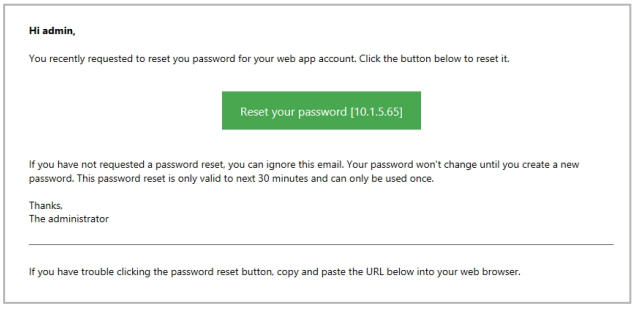
1. From the **Login** page, click **Forgot password** (see the picture below).



2. Enter the email address set in the procedure above (step 2).
3. Click **Reset** (see the picture below):



4. Go to your e-mail account and click the link for resetting the password (see the picture below):



Accounts and policies

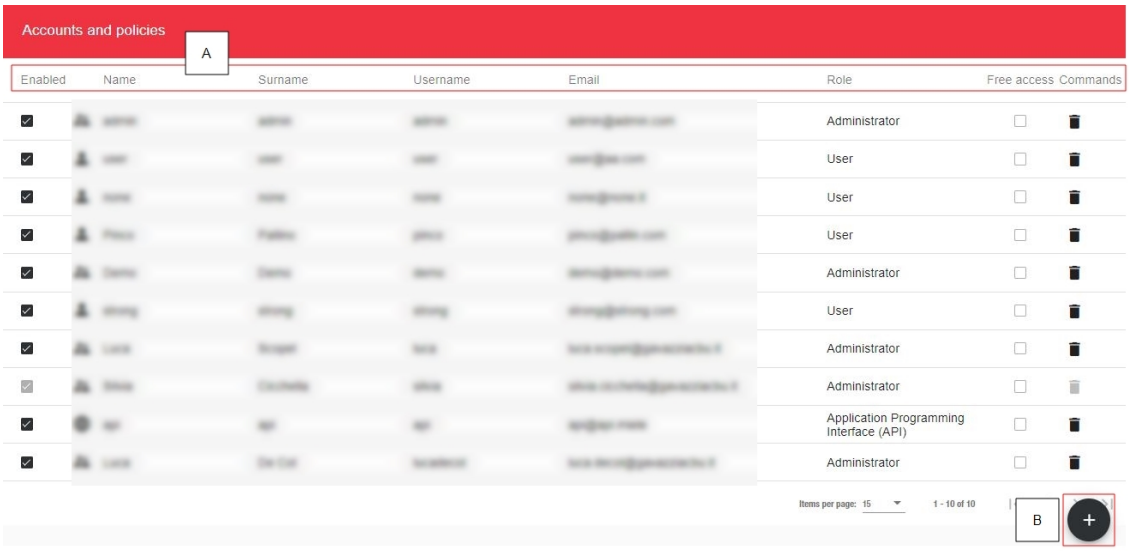
Content

This section includes the following sections:

Accounts and policies - main page 49
Tabs to create an account 50
Types of user 51
How to create an account 53

Accounts and policies - main page

From this page you can create and manage the accounts and the users' roles.



Area	Description
A	Accounts' list and details. *Note: administrators can assign a **Guest** user the **Free access** by checking the relevant field.* *For further information, see Accounts and policies > Types of user.*
B	Create an account.When you click it, you will see the following tabs according to the user you want to create: • **"Signals permissions" on the next page** • **"Home permissions" on the next page** • **"Pages visibility" on the next page** • **"Reports visibility" on the next page** • **"Preferences" on the next page.** *Notice: these tabs appear according to the type of user you decide to add. By default, if you add an administrator, all these tabs (except **Preferences**) are disabled since this kind of user has already all the permissions.* *For further information, see "Tabs to create an account" on the next page .*

Tabs to create an account

Signals permissions

From this tab, the administrators select the signals/parameters a user can see (i.e., **Read**). Users can see a function only if the administrator sets the function status to **Read**. If the administrator sets the function also to **Write**, users will be able to manage it.

Home permissions

From this tab, administrators manage the dashboard visibility permissions of the users. Administrators can give the user the following permissions:

- Access the editing mode from the dashboards (**Custom dashboard** )
- View the **Alarms**
- View the **Reports**

*Note: this tab is not available if administrators create **Guest** or **API** users.*

Pages visibility

From this tab, administrators assign the visibility of the available dashboards to the users.

*Note: this tab is not available if administrators create **API** users.*

Reports visibility

From this tab, administrators assign the visibility of the available **Reports** options to the users. Administrators can give the user the following permissions:

- **Template visibility**. Administrator flags the template(s) the user can view.
- **Accounts visibility**. Administrator flags the account(s) the user can view.
- **Schedules visibility**. Administrator flags the schedule(s) the user can view.

Preferences

From this tab, administrators can customize the other users' accounts.

Notes:

- *this options is not available for **API** users.*
- *Administrators cannot customize their own accounts.*

It is possible to change the **Language**, the **Font** and size of characters.

Moreover, it is possible to show/hide the titles, the RT time and set the naming levels in the functions.

Types of user

From the **Accounts and policies** page you can add/manage different types of user with different permissions.

The available types of user are:

- **Administrator**
- **User (the default one)**
- **Guest**

  *Note: you can enable the **Free access** only for ONE **Guest** user from the **Login** page or from the **Accounts and policies** page.*
- **API** (short of Application Programming Interface).

Please refer to the following table to see what each user type can do:

		Administrator	User	Guest
	Options			
Home page	**Tutorials**	V	V	X
	Editing mode	V	Only if administrators enable this option (***Accounts and policies***> *Select a user from the list* >***Home permissions*** *tab > Enable the* ***Custom dashboard*** )	X
Dashboards		V	Users can only manage the dashboards they have created and can only view the dashboards assigned by the administrator	Depends on the administrator (only view)

Main menu	**Settings menu**	V	V	X
	Logout	V	V	V
	Alarms	V	Depends on the administrator (only view)	X
	Reports	V	Depends on the administrator (only view)	X
	Search	V	V	X
	Services	V	X	X
	System info	V	V	X
	System settings	V	X	X
	Accounts and policies	V	X	X
	Name settings	V	X	X
	Online guide	V	V	X

How to create an account

(only for administrators)

1. From the **Navigation bar**, click ☰ to open the **Main menu**.
2. Select **Accounts and policies**.
3. From the main page, click ⊕ to open the configuration page.
4. From the **Account** tab, enter the account details.

   Note: you can assign a username just once.
5. Assign the user a **Role**:

   Note:

   - *From the bottom right menu (⋮≡), you can also copy an existing account to create one (⧉).*
   - *the other tabs appear according to the **Role** you select. For further information, see Types of user.*

If you select	Then...
Admin	All the tabs are automatically set and you are redirected to the main page.
User	Complete all the tabs: • From the **Signal permissions** tab, set the permissions for every existing function by checking the **R**(ead) or **W**(rite) fields. *Note: you can filter the function list using the ⋮ right-side menu (**Filter options**)* • From the **Home permissions** tab, enable the pages you want to assign to this user. • From the **Pages visibility** tab, enable the dashboards you want this user to see. • From the **Reports visibility** tab, set the desired options. • From the **Preferences** tab, set your interface preferences.
Guest	Complete the following tabs: • From the **Signal permissions** tab, set the permissions for every existing function by checking the **R**(ead) or **W**(rite) fields. • From the **Pages visibility** tab, enable the dashboards you want this user to see. • From the **Preferences** tab, set your interface preferences.
API	From the **Signal permissions** tab, set the permissions for every existing function by checking the **R**(ead) or **W**(rite) fields. *Note: the credentials you create for this type of user are used in API commands.*

6. From the bottom right menu (⋮≡) click 💾 to save your account.

   Note: once you have saved the account, you are redirected to the main page.

Name settings page

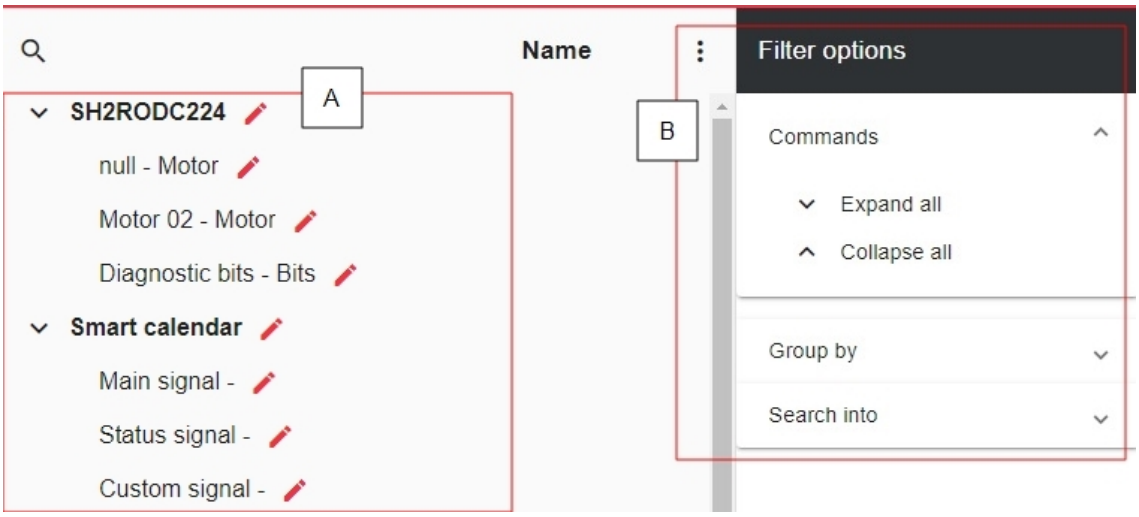
Content

This section includes the following sections:

Name settings page 55
How to rename items 56

Name settings page

From this page you can manage the web app function names.



Area	Description
A	Functions and signals' list. You can rename every item but the system parameters ( ). *Note: you can only rename 10 items at the same time.*
B	**Filter options** menu. You can reorder and filter the functions'/ signals' list. You can also search ( ) an item among the filtered options.

How to rename items

(only for administrators)

1. From the **Navigation bar**, click to open the **Main menu**.
2. Select **Name settings**.
3. Select the item you want to modify.
4. Click to edit
   Note: you can edit 10 items at the same time.
5. Click to save the changes
   Note: you can also restore the default name of a single item (from the relevant row) or of all the modified items (from the menu).

Notice: every change is also saved in the UWP IDE.

Dashboards

Content

This chapter includes the following sections:

How to access a custom dashboard 58
How to access a function dashboard 59
Dashboards elements 60
Things to know 67
How to 71

How to access a custom dashboard

1. From the **Navigation bar**, click  to open the **Main menu**.
2. Select a **Custom dashboard**.

   Notice: the list of function dashboards depends on the UWP IDE configuration . For further information, see UWP IDE manual.

How to access a function dashboard

1. From the **Navigation bar**, click ☰ to open the **Main menu**.
2. Select a **Function dashboard**.

   Notice: the list of function dashboards depends on the UWP IDE configuration . For further information, see UWP IDE manual.

Dashboards elements

Content

This chapter includes the following topics:

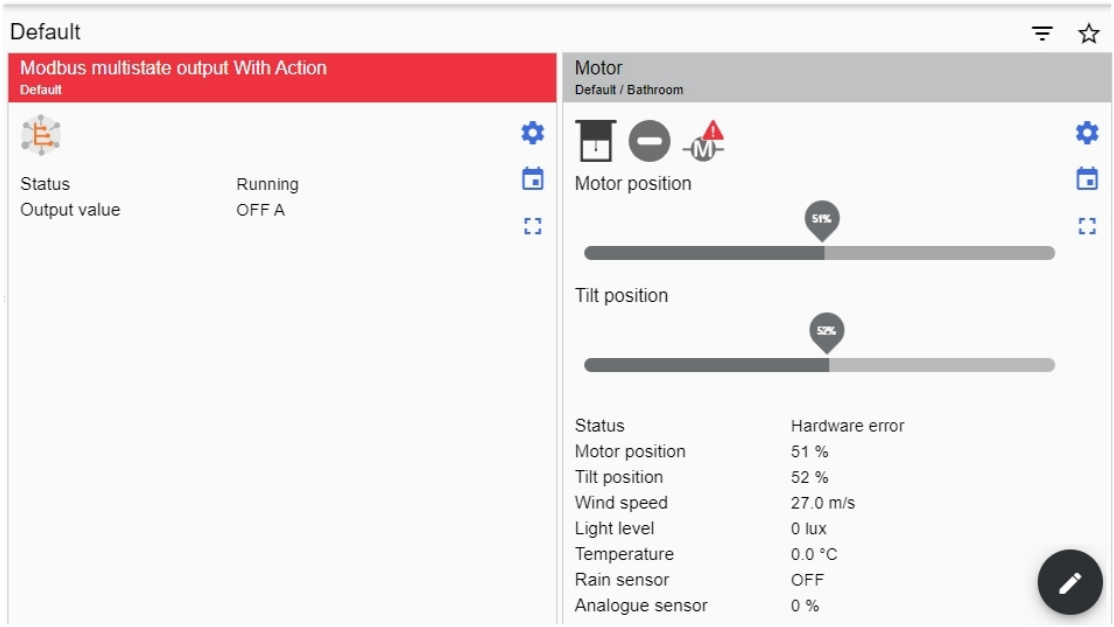
Common elements 61
Widget dashboard 62
Custom chart dashboard 63
Energy summary dashboard 64
Chart template dashboard 66

Common elements

Element	Description
Default	Dashboard selector.
	Filters the available types of user. *For further information, see Types of user.*
	Adds a dashboard to the favourites list. You can add or remove the dashboard to/from the favourites' list, displayed in the navigation bar. *Note: once you have marked a dashboard as a favourite, the relevant icon will appear in the navigation bar.*
	Accesses the **editing mode**: 

Element	Function
	Dashboard management menu. You can: • **Add** a Dashboard *For further information, see "What is a dashboard" on page 68* • **Move/Clone/Delete/Set as home page** an existing Dashboard • Set the **background colour** • Manage the **Template editor** • **Set users** who can have visibility on the page. *Note: you can also manage the visibility clicking*  .
	Selects the users who can view the dashboard. *Note: you can also manage the visibility from* ***> Set users***.
Default	Changes the Dashboard title.
	Saves the changes.
	Discards the changes.

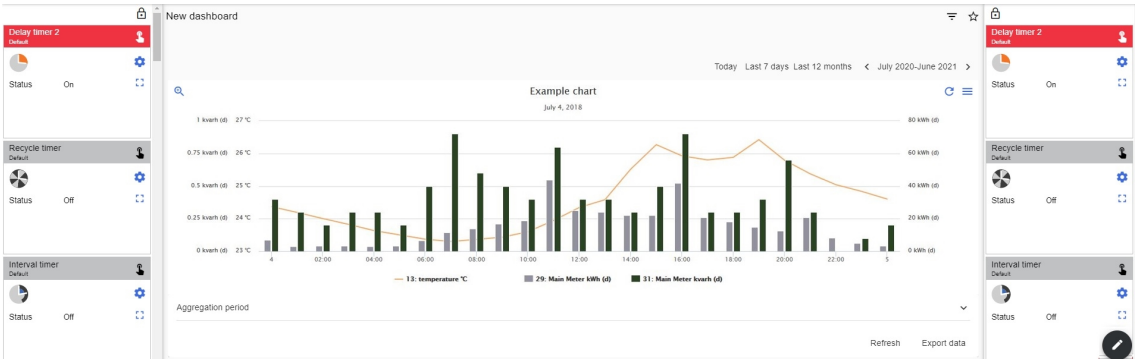
Widget dashboard



Example of widget dashboard

Icon	Description
	Accesses the **editing mode**:  **Element** / **Function**  Add widget elements, such as: • **Functions** • **Real-time** • **History** • **Separator.** *Note: this icon only appears when you add a Widget dashboard (the default one).* *For further information, see **Types of widget.***

Custom chart dashboard



Example of custom chart

Icon	Description
	Accesses the **editing mode**: 

Element	Function
	Dashboard management menu (see ***Dashboards > "Common elements" on page 61***).
Two columns	Layout preference menu: • No column; • Left column; • Right column; • Two columns. *Note: These options are available in the **Chart template** and the **Energy summary dashboard** too.*
	Adds a type of widget (from the columns).
	Locks / Unlocks the column(s).

Notice: If you first select a layout and then another one, the content of the first selected layout will be lost.

Energy summary dashboard

Example of energy summary

Icon	Description
Charts summary	

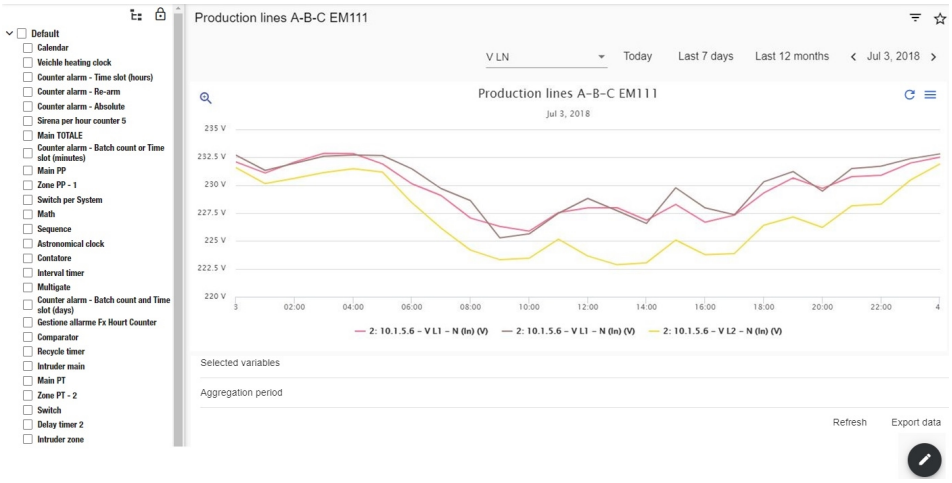
Icon	Description
	Layout preference menu: • **Daily Chart;** • **Monthly Chart;** • **Yearly Chart;** • **Total options.**
Device	Device whose data are displayed.
Daily	Daily data view.
Monthly	Monthly data view.
Yearly	Yearly data view.
Total	Total data view.

Icon	Description
	Accesses the **editing mode**:

Element	Function
	Dashboard management menu (see ***Dashboards > "Common elements" on page 61***).
Two columns	Layout preferences menu: • No column; • Left column; • Right column; • Two columns. *Note: These options are available in the **Chart template** and the **Energy summary dashboard** too.*
	Adds a type of widget (from the columns).
	Locks / Unlocks the column(s).
	**Conversion type** selector.

Notice: If you first select a layout and then another one, the content of the first selected layout will be lost.

Chart template dashboard



Example of chart template

Icon	Description
	Accesses the **editing mode**: **Element** / **Function**  Dashboard management menu (see ***Dashboards > "Common elements" on page 61***). Two columns: Layout preference menu: • No column; • Left column; • Right column; • Two columns. *Note: These options are available in the **Chart template** and the **Energy summary dashboard** too.*  Adds a type of widget (from the columns).  Devices selector: you can select the devices whose variables will be displayed in the chart. *Notice: If you open it, the widgets you have added in the relevant column disappear. As you close it, the widgets appear again.*  Locks / Unlocks the column(s). *Notice: If you first select a layout and then another one, the content of the first selected layout will be lost.*
	Chart template selector.

Things to know

Content

This chapter includes the following topics:

What is a dashboard 68
Custom dashboard 69
Function dashboard 70

What is a dashboard

A dashboard is a widgets container where you can easily perform the following actions:

- View real-time data and charts
- Verify the alarms
- Send commands (e.g. switch lights ON/OFF, set the temperature, etc.)
- Set function parameters.

UWP 4.0 Web App allows you to view two types of dashboard: the **Function dashboard** and the **Custom dashboard**.

Note: To get from one dashboard to another, it is possible to swipe left and right.

Custom dashboard

A **Custom dashboard** contains the widgets that you choose from the Web App.

In each dashboard, it is possible to set:

- the dashboard title and
- the associated widgets.

Moreover, there are four types of **Custom dashboard**:

- Widget dashboard. It allows you to manage and create widgets (see Create a new widget).
- Custom chart dashboard. This dashboard is dedicated to the charts creation and management.
- Chart template dashboard. This dashboard is dedicated to the chart templates that you can add, change or remove to create custom chart.
- Energy summary dashboard. This dashboard displays Daily, Monthly and Yearly consumption data for an ordered list of meters (selected by the user). Furthermore, by means of this page it is possible to select the variables out of the list of the available variables in the target meter; and change the engineering unit so as to align all the data to a common unit; a set of conversion scale factors is available. Nonetheless, you are free to change the scale according to the needs.

Function dashboard

A **Function dashboard** is automatically generated by the system during the configuration process.

Each **Function dashboard** contains all the widgets belonging to a specific type of function, whose name is given to the dashboard.

Note: from the web app you only see the functions set from the UWP IDE and you cannot modify them.

How to

Content

This chapter includes the following topics:

How to create a custom dashboard 72
How to manage a chart template 73

How to create a custom dashboard

1. From a dashboard, click  to access the editing mode.
2. Click  to open the Dashboard management menu.
3. Hover over **Add** to select the type of Custom dashboard to add.
4. Give the selected type of Custom dashboard a title.

If you choose a…	Then…	And…
Widget dashboard	select a type of widget to add	click **Apply** to save the selection
Custom chart or an Energy summary dashboard	select the layout preferences: • No column • Left column • Right column • Two columns	select the widget to add
Chart template		select the template (set of variables)

5. Complete the selected Custom dashboard.
6. Save by clicking  or click  to exit the editing mode.

For further information, see "Custom chart dashboard" on page 63, "Energy summary dashboard" on page 64 and "Chart template dashboard" on page 66.

How to manage a chart template

1. From a dashboard, click  to access the editing mode.
2. Click  to select the **Template editor** option.
3. From the **Template editor** page, click  to access the editing mode.

If you choose to…	Then…	And…
create a new template	Click  , select the variables to include in the template	click **Apply** to save the selection
modify an existing template	Flag the template to modify, click  to change the variables to include	Click  to save the new selection
delete an existing template	Flag the template to delete	Click  to delete it

Notice: the default templates (the grey ones) cannot be modified or removed.

4. Click  to save the changes.

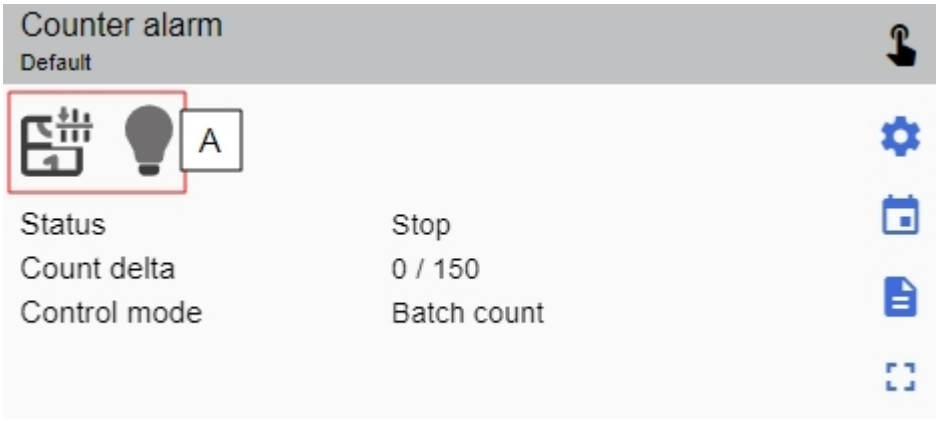
Widgets

Content

This chapter includes the following sections:

Widgets common elements 75
Things to know 77
Procedures 81

Widgets common elements



Element	Description
A	Basic/Default and status icons.
	Commands according to the function. *For further information, go to "Function widget elements" on page 100*
	Accesses the widget settings page. *Note: for each type of widget, there are different parameters to manage.*
	Calendar for the events scheduling (go to "Schedule an event" on page 90).
	From the generic alarm widget, it redirects you to the **Alarms** page; from the **Counter Alarm** function widget, it permits you to select the format of a report that you will find in ***Reports*** page ***> History*** tab. *Note: only for the **Alarm** functions ("Types of alarm function" on page 174).*
	Expands the command menu. *For further information, go to **"Functions" on page 92 > User interface**.*

Functions featuring the Local calendar

Note: the following list depends on what you configure from the UWP IDE.

- "Alarm" on page 111
- "Astronomical clock" on page 150
- "Calendar" on page 139
- "Analogue comparator" on page 104
- "Counter" on page 102
- "Counter alarm" on page 113
- "Main intruder alarm" on page 120
- "Sequence" on page 137
- "Smart calendar" on page 141
- "Switch" on page 101
- "System temperature" on page 144
- "Timers" on page 124

- "Vehicle heating" on page 147
- "Zone intruder alarm" on page 118
- "Zone temperature" on page 142

Things to know

Content

This chapter includes the following topics:

What is a widget 78
Types of widget 79

What is a widget

A widget is a graphic element contained in a dashboard that allows the user to interact with the system managed by UWP 4.0.

According to the type of widget, you can:

- View real-time data, the status of a function or an alarm condition
- Access the settings of a function
- View charts
- Send commands
- Customize the distribution of widgets.

Types of widget

Function widget

The **Function** widget is associated to a specific function, previously configured from the UWP IDE.
According the associated function, you can:

- send commands (e.g. , switch lights ON/OFF, raise/lower blinds, etc.)
- change set points (e.g., heating set point) or other parameters (e.g., delays)
- view the function status or alarms.

Real-time widget

The **Real-time** widget shows the real-time value or status of the selected variables.

Note: you can assign a title to the widget.

History widget

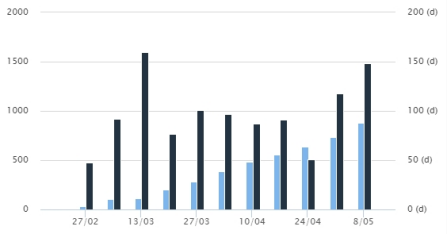
The **History** widget shows the real-time value or status of the selected variables* and their trend*.

**Notes:*

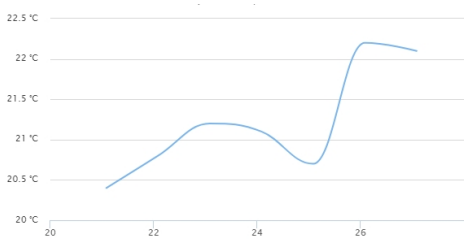
- *The variables are plotted on a chart that is displayed in another page*
- *The same variables displayed both in the history widget and in the real-time widget may have different names.*

For each variable, you can select the type of chart for average, MIN and MAX values:

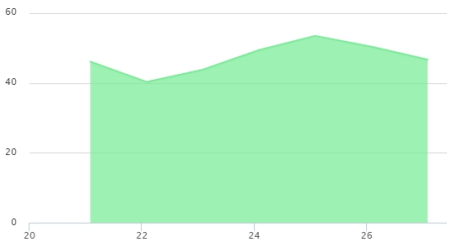
Line



Bar



Spline



Area

Separator widget

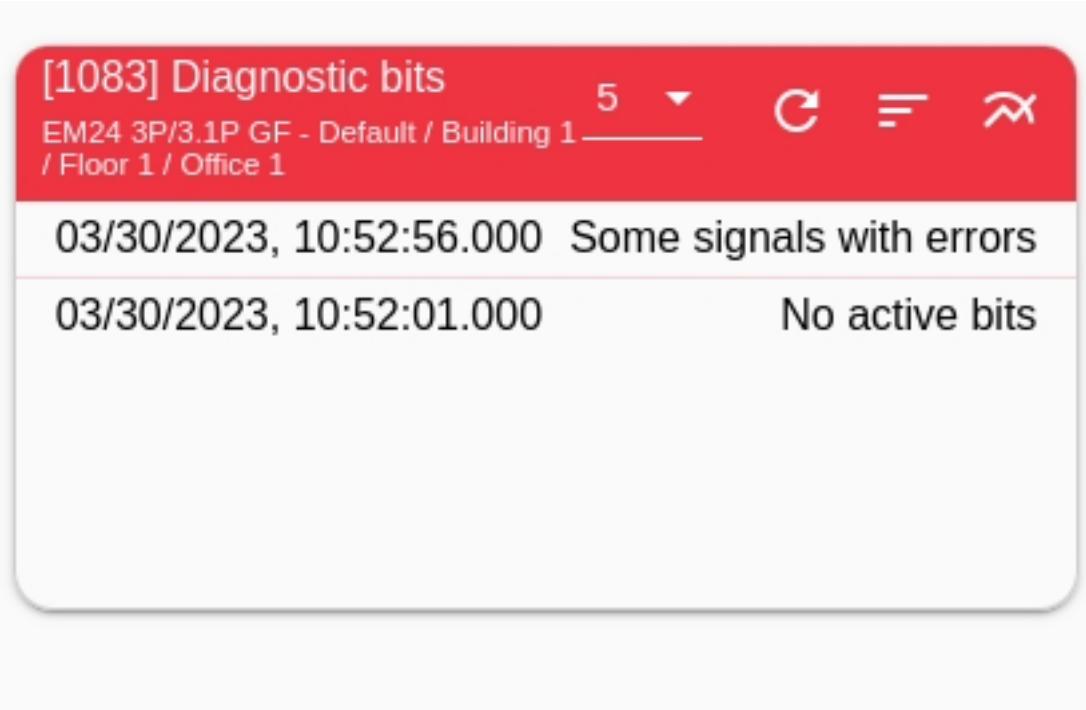
The **Separator** widget allows you to customize the distribution of the widgets in the dashboard.
You can:

- change the automatic distribution of the widgets
- tile horizontally two or more widgets (up to 4)
- regroup widgets by function.

*Notice: this widget is not available in the **Custom chart dashboard**.*

Event widget

The **Event widget** allows you to view the events in a table, as shown in the picture below:



From the drop-down menu, you can set the number of events to be shown (5, 10, 20 or 50). Moreover, clicking the icon will open the **History** chart.

Procedures

Content

This chapter includes the following topics:

Create a widget 82
Create a chart 83
Remove a widget 87
Move a widget to another page 88
Copy a widget 89
Schedule an event 90
Manage the widget settings 91

Create a widget

In the Widget dashboard

1. Click  to access the editing mode.
2. From the edit toolbar, click  to select the type of widget to add.
3.

If you choose a…	Then…
Function widget*	Select the available parameters or signals to add and click **Confirm**.
Real-time widget	
History widget**	
Separator	Choose a position.
Event widget	Select a signal (just one), set the number* of events to be shown and click **Confirm**. **Note: the number you set is saved as the default value.*

4. From the edit toolbar, click  to save the changes.

In the Custom chart / Chart template/ Energy summary dashboard

1. Click  to access the editing mode.
2. From the edit toolbar, click  to select the type of widget to add.
3. Click **Confirm** to add the widget.
4. From the edit toolbar, click  to save the changes.

Create a chart

In the Widget dashboard

1. Add a history widget (see "Create a widget" on the previous page).
2. Click **Select variables** to open the available parameters page.

Icon	Description
	Selects the variables (max. 16)
	Searches the variables
	Accesses the Filters: • Group by (None/Module/Name/Signal Class/Location) • Search in (Module/Name/Signal Class/Location) • Show (All items/Selected items/Unselected items)

3. Click **Apply** to save the selection.
4. Assign the widget a title
5. Click  to save the widget.
6. Enter the chart page by clicking  .
7. Assign the chart another title.
8. From the list, select the type of chart.
9. Select the Aggregation period (under the **Select variables** field)
10. Complete the chart by choosing one of these options.

If you select…	Then…
Compare	It will compare the data of the current period with the data of another selected period.
Preview	The chart will be refreshed with the updated parameters.
Save chart	The chart will be saved and added to the **Widget dashboard**.
Export data	The chart will be sent to the **Reports page**
Cancel	Discard the changes.

In the Custom chart dashboard

1. Create a Custom chart dashboard (see "How to create a custom dashboard" on page 72).
2. Assign the chart another title.
3. Click **Select variables** to open the available parameters page.

Icon	Description
	Selects the variables (max. 16)
	Searches the variables
	Accesses the Filters: • Group by (None/Module/Name/Signal Class/Location) • Search in (Module/Name/Signal Class/Location) • Show (All items/Selected items/Unselected items)

4. From the list, select the type of chart
5. Select the Aggregation period (under the **Select variables** field)
6. Complete the chart by choosing one of these options.

If you select…	Then…
Compare	It will compare the data of the current period with the data of another selected period.
Preview	The chart will be refreshed with the updated parameters.

7. Click  to save the dashboard.
8.

If you want to…	Then click…	And…
Refresh the chart	**Refresh**	View the updated chart
Export the chart	**Export data** to choose a file format	Go to the **Reports** page to see the export

In the Chart template dashboard

1. Create a **Chart template dashboard** (see "How to create a custom dashboard" on page 72).
2. Select a template from the list.
3. Assign the chart another title.
4. Select the **Aggregation period** (under the **Title** section)
5. Complete the chart by choosing one of these options.

If you select…	Then…
Compare	It will compare the data of the current period with the data of another selected period.
Preview	The chart will be refreshed with the updated parameters.

6. Click ✔ to save the dashboard.

In the Energy summary dashboard

1. Create (see "How to create a custom dashboard" on page 72) or select an Energy summary dashboard.
2. From the column, click ⋮ to select the Chart widget.
3. Follow the same procedure described in ***How to create a chart > "In the Widget dashboard" on page 83*** (from the Step 2).

Remove a widget

1. Click  to access the editing mode.
2. Click the widget to modify.
3. From the edit menu, click  to remove the widget.
4. Click  to save the changes.

Move a widget to another page

1. From the widget dashboard, click  to access the editing mode.
2. Click the widget to modify.
3. From the edit menu, click the icon to move the widget.
4. Select the dashboard and the column where to move the widget.
5. Click  to save the changes.

Copy a widget

1. From the widget dashboard, click  to access the editing mode.
2. Click the widget to modify.
3. From the edit menu, click  (copy).
4. Select the dashboard and the column where to copy the widget.
5. Click  to save the changes.

Schedule an event

1. From a widget, click  to access the event-scheduling page.
2. Click  to open the configuration window.
3. Fill in all the fields.

Element	Description
Name	In this field, you define the name of the event that will appear on the calendar.
Start date	Date at which the event will start
Start time	Time at which the event will start.
End date	Date at which the event will finish.
End time	Time at which the event will finish.
Event **Action at start/end time**	You can decide the action to be performed as the time period starts or finishes.
Action during the whole period	You can disable the automation or execute no action during the selected period.

4. Click **Save**.

Manage the widget settings

(only for administrators)

From the Web App, you can just manage the available function settings but you cannot remove or add parameters. The function parameters can only be added or removed by means of the UWP IDE.

1. From a widget, click  to access the settings page.
2. Select the parameter(s) to adjust.
3. Click  to send the parameter(s).

Functions

Content

This chapter includes the following sections:

What is a function 93
Types of function 94
Descriptions of the functions 96
Function widget elements 100
Procedures 152

What is a function

A **function** is a set of instructions that in presence of one or more commands (e.g., button pressing) and one or more conditions (e.g., the temperature is lower than a defined set point) generates one or more actions (e.g., switch lights ON/OFF or activate the boiler) or alerts.

There are predefined functions used to manage a whole series of automations, from lights to roller blinds.

Function type	Description
Light	ON/OFF, dimmable or constant lights. You can also set light intensity and colour. *For further information, see "Light control modes" on page 128*
Temperature control	Heating, ventilation and air conditioning control. *For further information, see "System temperature" on page 144 and "Zone temperature" on page 142*
Motor	Blind, gate and valve control. *For further information, see "Motor" on page 134*
Sequence	Set of functions executed in sequence. *For further information, see "Sequence" on page 137*
Alarm	Smoke, water,[1]main intruder, zone intruder, hour counter, counter alarm, siren functions. *For further information, see "Alarms page" on page 165*

Note: There are further available functions that can be defined and configured by means of the wizard IDE. For further information, see the UWP IDE manual.

[1]Included in the Alarm function

Types of function

Light functions

These functions allow you to manage one or more lights at the same time.

You can either configure a basic function to switch the light on manually, or an automatic system by programming the relevant objects of the function.

From the Web App, you can:

- Switch a light ON/OFF (**Light function**)
- Dim the light (**Dimmable light function**)
- Set a constant light (**Constant light function**)

Temperature control functions

From the UWP IDE, you can manage the temperature inside the building, creating different zones depending on the different requirements. Each zone function can correspond to a part of the building (e.g. an office) where the user wants to control the heating/cooling.

The functions dedicated to the temperature control are the:

- **Zone temperature function**
- **Cooling temperature system function**
- **System temperature function**

Rolling shutters functions

These functions allow you to manage the motor to control roller blinds.

You can either configure a basic function to move blinds up and down or an automated system by programming the relevant objects of the function.

From the Web App, you can:

- Control the roller blind movement;
- Adjust the tilting slats;
- Control the window movement.

Sequence functions

The sequence functions allow you to put together the existing functions and activate/deactivate them with a single click. All the selected functions are activated according to a certain time and order. The sequence starts by activating the first function of the list and goes on with the others, until the last function in the list is executed.

All the types of function can be added to the sequence.

Alarm functions

The **Alarm** functions are configured via UWP IDE and can be also managed in the dedicated**Alarms** page.

For further information, see :

- *Types of alarm function*
- *Alarm*
- *Counter alarm*
- *Hour counter*

- *Main intruder alarm*
- *Zone intruder alarm*

Descriptions of the functions

Alarm

The **Alarm** function permits to implement the alarm functionality for digital/analogue generic signals, smoke/water or metering applications and to configure the alarm annunciator sequence.

It is possible to set the output and feedback options according to the following alarm annunciator sequences: ISA-A, ISA-A5, ISA-R8, ISA-M, ISA-M5.

For further information, see

- *Alarms page 1*
- *"Types of alarm function" on page 174*
- *"Alarm" on page 111*
- *"Counter alarm" on page 113*
- *"Hour counter" on page 116*
- *"Main intruder alarm" on page 120*
- *"Zone intruder alarm" on page 118*

Analogue output

The **Analogue output** function permits you to connect one or more system signals to an analogue output module.

The function manages the following types of signal:

- **10 V signals** (SHPOUTV224 module). This type of signal is an industrial standard that transmits a value to a panel meter or to an actuator (e.g. pump, boiler, fan). The programmability of the output signal permits also to manage the 0-1 V / 0-5 V industrial signals.

For further information, see "Analogue output " on page 108

Astronomical clock

The **Astronomical clock** function automatically calculates the sunset and sunrise times according to the geographical location: the calculation is performed by the latitude and longitude coordinates provided by the user. The output value of the function is a level signal: when the time is between the sunset and sunrise times, the output value is ON (**Night condition**), otherwise the output value is OFF (**Day condition**). The function is an ideal solution for turning the lights ON at sunset and OFF at sunrise, typical for street lights application.

For further information, see "Astronomical clock" on page 150

Calendar

The **Calendar** function manages an ON/OFF digital signal that changes according to the calendar activities you set.

For further information, see "Calendar" on page 139

Comparator

The **Comparator** function can be used to compare two values. It permits also to change the comparison values, such as:

- Command signals
- Calendar
- Another **Comparator** function values.

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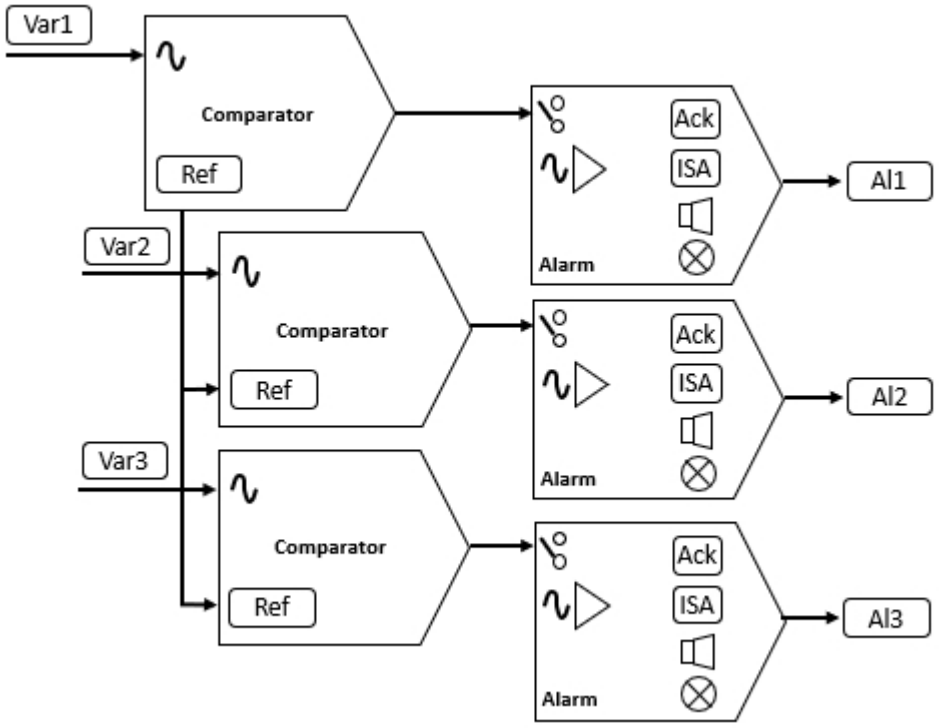
*1*Page dedicated only to the alarm functions

Please refer to the picture below to better understand the functioning of the **Comparator**.



For further information, see "Analogue comparator" on page 104

Counter

The **Counter** function is a counter of input pulses with increment and decrement, which logs the total counter - or just the partial one - between the last two sampling times. The counted value can also be used to control an analogue output module.

For further information, see "Counter" on page 102

Light

The **Light** function permits you to control one or more bright objects through three different control modes that adapt to the actuator you want to control.

Following are the three control modes:

- ON/OFF
- dimmer
- constant light.

For further information, see "Light control modes" on page 128

Mathematical

The **Mathematical** function provides a set of mathematical operations on two or more analogue input signals.

For further information, see "Mathematical" on page 107

Modbus outputs

The **Modbus output** functions permit you to write one or more variables previously defined in a Modbus driver created in the UWP IDE.

According to the type of variable you want to control, there are three functions available:

- **Analogue output** function. It permits writing the analogue variables (function codes 6 or 16)
- **Digital output** function. It permits writing the digital variables (function codes 1 or 2)
- **Multistate output** function. It permits writing the multistate analogue variables (function codes 6 or 16)

  Note: each Modbus output variable must first be created at the driver level (type and format) to be then written by the functions described above.

The **Modbus output** functions permit:

- scaling between the output value calculated by the function and the value written in the output signal (only analogue output through min./max. input range)
- writing the output when the function value changes
- forcing the output value to a defined value
- periodically writing the output value (through the Refresh output timer parameter)
- writing the output value from local calendar
- calculating the function output value according to the input signals.

Note: the Modbus multistate output function does not support this feature.

For further information, see "Analogue output " on page 108

Motor

The **Motor** function permits you to control blinds and windows that use a motor to manage the position. Moreover, thanks to this function, you can control 3-wire valves.

This function has been designed to manage one or more motor outputs or electronic boards piloted by digital outputs (relays).

For further information, see "Motor" on page 134

Multigate

The **Multigate** function can be used to perform a logical operation with one or more inputs to have a single logic output status.

For further information, see "Multigate" on page 106

Smart calendar

The **Smart calendar** function permits defining a command list for every activity scheduled.

For further information, see "Smart calendar" on page 141

Switch

The **Switch** function allows you to activate or deactivate any type of load (e.g. a relay).

For further information, see "Switch" on page 101

System temperature

The **System temperature** function permits to manage the seasonal change of the temperature control and to command the hydraulic circuit pump and/or the heating/cooling generator.

For further information, see "System temperature" on page 144

Timers

Delay timer

Using the delay timer, the output replicates the status of the input, applying a delay on and/or a delay off timer.

Interval timer

The timer function can be used to control an output where an automated timer is required.

Cyclic timer

In the Cyclic timer function, until the trigger input is on, the output goes on and off with fixed timing.

As soon as the trigger signal is activated, the output starts going on/off according to the Ton and Toff times; when the stop signal is activated, the output goes off.

For further information, see "Timers" on page 124

Vehicle heating

The **Vehicle heating** function permits to adjust the timing advance of a heater starting according to the external temperature so to have a warm environment at the time scheduled.

For further information, see "Vehicle heating" on page 147

Zone temperature

The **Zone temperature**e function can be configured according to one of the following working modes:

1. Heating
2. Cooling
3. Heating / Cooling. Independent control modes that can activate at the same time (double independent circuit).
4. Heating / Cooling shared. Shared control modes that cannot activate at the same time and require the inversion of the seasonal system.

For further information, see "Zone temperature" on page 142

For further information, see UWP IDE manual

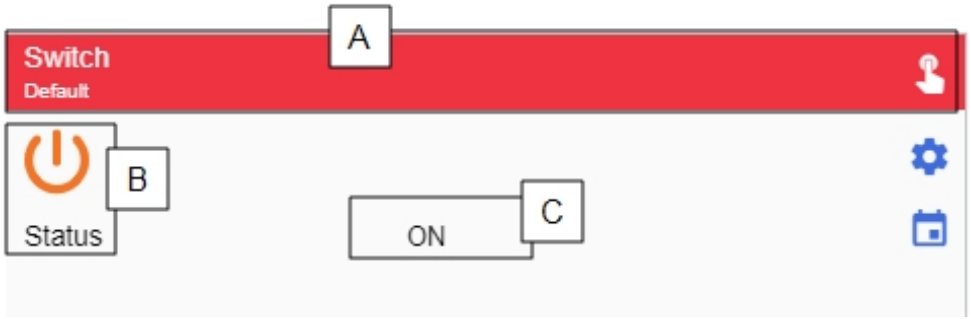
Function widget elements

Content

This chapter includes the following topics:

Switch 101
Counter 102
Analogue comparator 104
Multigate 106
Mathematical 107
Analogue output 108
Modbus outputs 110
Alarm 111
Counter alarm 113
Hour counter 116
Zone intruder alarm 118
Main intruder alarm 120
Siren 122
Timers 124
Light control modes 128
Motor 134
Sequence 137
Calendar 139
Smart calendar 141
Zone temperature 142
System temperature 144
Vehicle heating 147
Astronomical clock 150

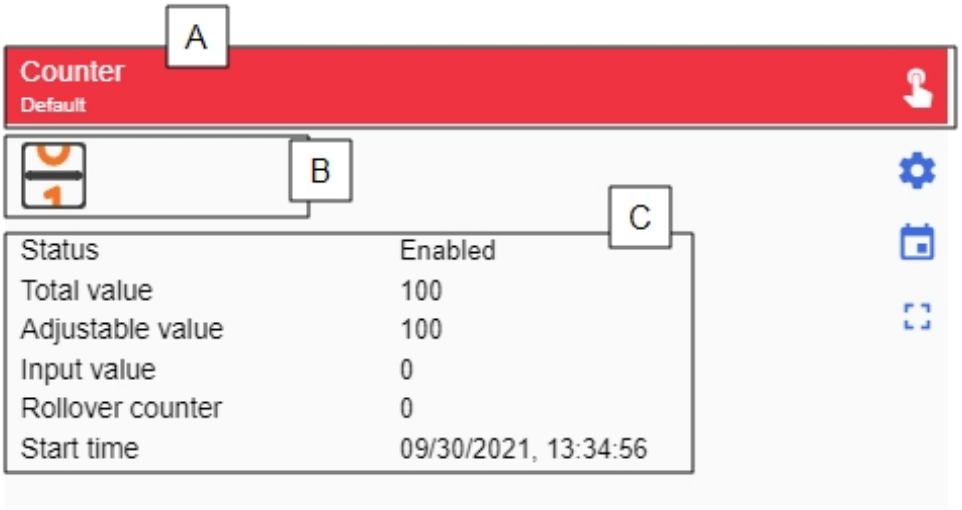
Switch



Switch ON

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	**Status icons** OFF ON ON with timeout Disabled, output OFF Disabled, output ON Forced OFF, output OFF Forced ON, output ON Disabled, output OFF and disable timer is running Disabled, output ON and disable timer is running
C	Shows the function status and the count down of the energy save timer.
	Accesses the function parameters: **Energy save timer**. *For further information, see "Switch procedures" on page 152*
	Accesses the event settings

Counter

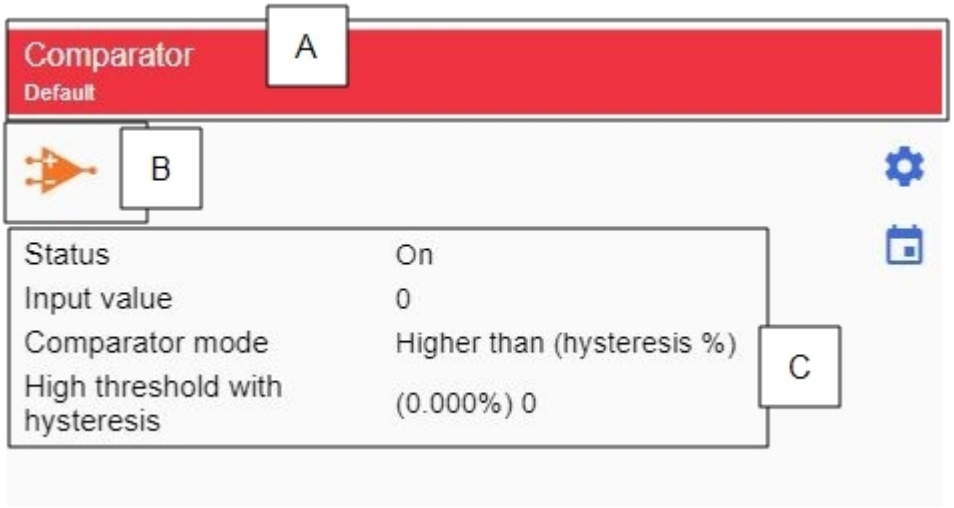


Counter ON

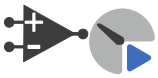
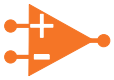
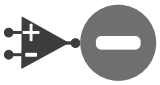
Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	**Status icons** Disabled Enabled *Note: see the relevant status icons below.*
C	Shows the function status, the counter value and the relevant measure unit (configured via IDE), the rollover value, the counting start/end time.

Element	Description		
	**Drawer containing the Command icons:**		
		**Enable**	*Note: If the status is disabled, the other icons will be grey.*
		**Disable**	
		**Reset adjustable value**	
		**Reset rollover counter**	
		**Increment**	The **Increment/Decrement** icons are available only if the value is set to another number than 0.
		**Decrement**	They will increment/decrement the **Total/Adjustable values** according to the number set.
		**Set value**	If you click it, the number will be applied to the **Total/Adjustable values**.
	Accesses the function parameters: • **Reset value** • **Enable/Disable rollover** *For further information, see "Counter procedures" on page 158*		
	Accesses the event settings *For further information, see "Counter procedures" on page 158*		

Analogue comparator

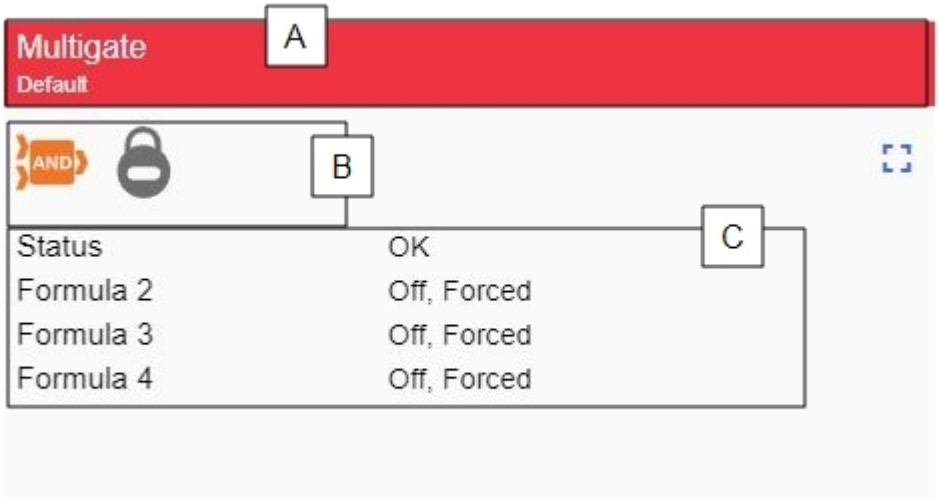


Comparator ON

Element	Description
A	**Function status bar** *Note: see the relevant status icons below.*
B	**Status icons**  OFF  OFF, Delay Timer ON is running  ON  ON, Delay Timer OFF is running  OFF (Disabled)  ON (Disabled)

Element	Description
C	Shows the: • function status • input signal value and the relevant decimals/measure unit selected from the IDE • the low/high reference threshold • the delay timer ON/OFF.
	Accesses the function parameters: • **HIGH reference** • **HIGH reference hysteresis** • **LOW reference** • **LOW reference hysteresis** • **Delay ON** • **Delay OFF** • **Comparator mode.** For this mode you can configure the following parameters: ◦ HIGH with percentage hysteresis ◦ HIGH with hysteresis ◦ LOW with percentage hysteresis ◦ LOW with hysteresis ◦ Inside LOW-HIGH ◦ Outside LOW-HIGH ◦ Disable, state Off ◦ Disable, state On ◦ External reference
	Accesses the event settings

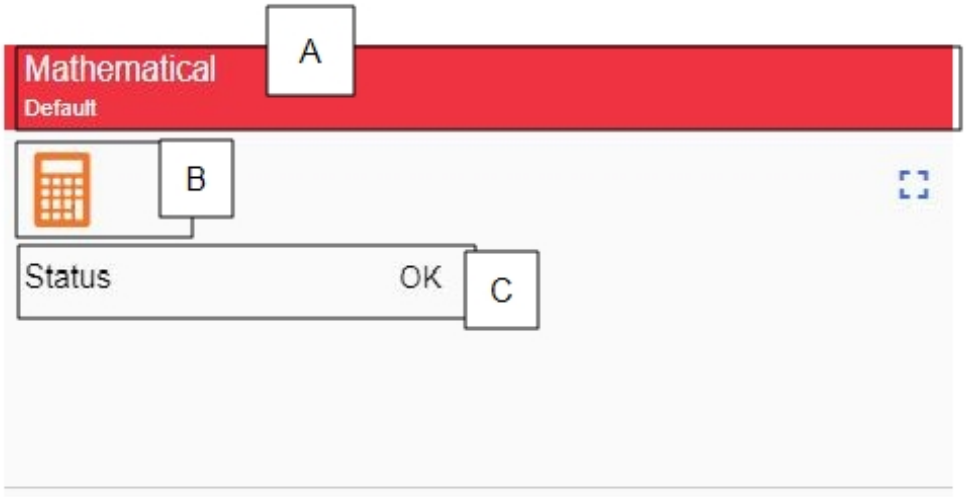
Multigate



Multigate ON

Element	Description
A	**Function status bar**. *Note: see the relevant status icons below.*
B	**Status icons** Forced Invalid Input value Invalid result
C	Shows the function status and the formula values (even in case of error).
	Drawer containing the Command icons: Force ON Force OFF

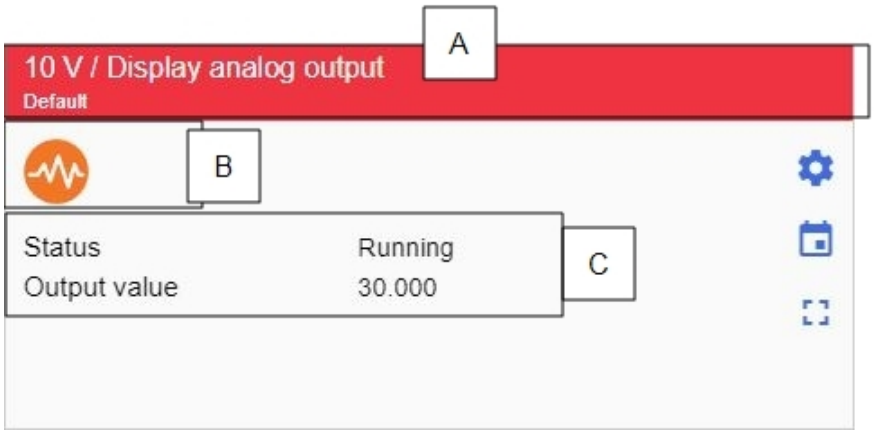
Mathematical



Mathematical ON

Element	Description
A	**Function status bar**
B	**Status icons** Forced Invalid input value Invalid result
C	Shows the function status and the formula values (even in case of error)
	Drawer containing the Command icons: Force value

Analogue output



Analogue output ON

Element	Description
A	**Function status bar** *Note: see the relevant status icons below.*
B	**Status icons** Running Forced Disabled Disabled with timer running Not valid input
C	Shows the: • function status • output value (set from the UWP IDE) • disable timer • refresh output timer (shown only if active).

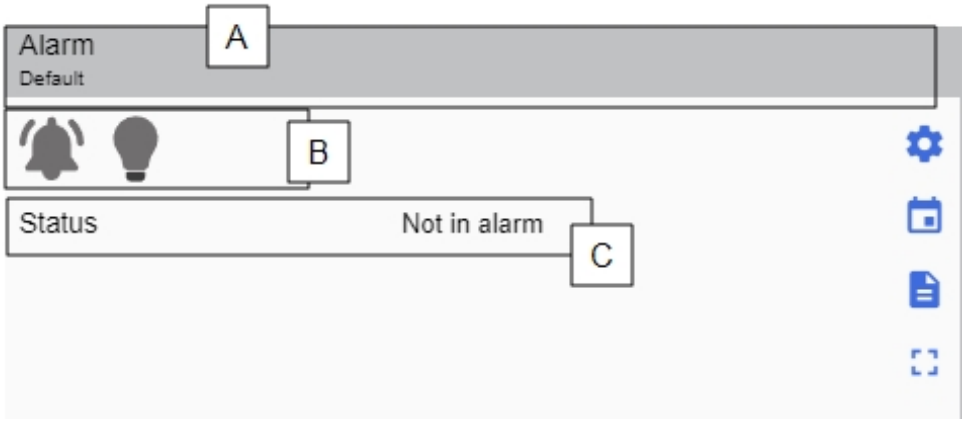
Element	Description	
	**Drawer containing the Command icons:**	
		**Set forced value** *Note: If you click it, the number will be applied to the **Total/Adjustable values**.*
		**Activate forced value**
		**Deactivate forced value**
		**Refresh output**
	Accesses the function parameters	
	Accesses the event settings	

Modbus outputs

Modbus outputs ON

Element	Description
A	**Function status bar** *Note: see the relevant status icons below.*
B	**Status icons** *Note: the first icon changes according to the Modbus output type (analogue, digital or multistate).*  Running  Forced
C	Shows the function status and the input/output values.
	**Drawer containing the Command icons:**  Set forced value  ON (forced)  OFF (forced)  Refresh output
	Accesses the function parameters: • **Disable timer** • **Refresh output timer** • **Waiting time for writing**
	Accesses the event settings

Alarm

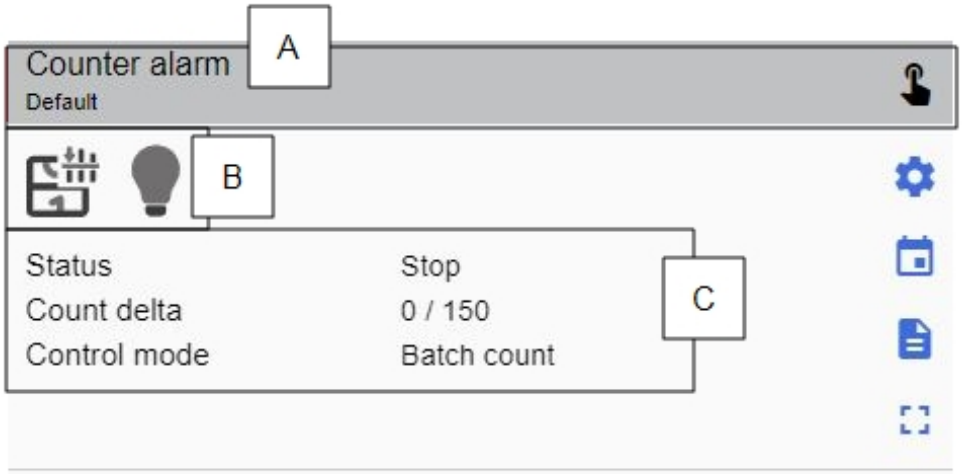


Alarm OFF

Element	Description
A	**Function status bar** *Note: see the relevant status icons below.*
B	**Status icons** *Note: the first icon changes according to the alarm type (generic, smoke or water). See "Types of alarm function" on page 174* OFF ON Was ON ON, acknowledged Was ON, acknowledged Reset Reset with timeout

Element	Description
C	Shows the: • alarm status • alarm event time/day • alarm acknowledgement time/day • alarm reset time/day. *Note: if there are not active alarms, you can see the previous alarm time/day; if a new alarm is active, you will see the relevant information.*
	**Drawer containing the Command icons:**  Reset  Acknowledge
	Accesses the function parameters: • **Siren timer,** siren activation timer (0 - 24 h. Default: 1 minute). When the siren is active, the output Siren status is ON. *Note: it can be disabled manually by using the Acknowledgement / Reset command.* • **Reset timer,** sets the time period after which the alarm condition turns ON again (0 - 24 h. Default value: 1 min). If the timer value is set to 0 s, the command is temporary. • **Acknowledgement with auto reset,** acknowledges the alarm and activates the Reset ON. The acknowledgement command never activates the Reset timer, even if its value is different from 0. • **Siren ON when return to normal state**
	Accesses the event settings
	Accesses the ***Alarms page > Event logs*** *For further information, see "Events log tab" on page 169*

Counter alarm



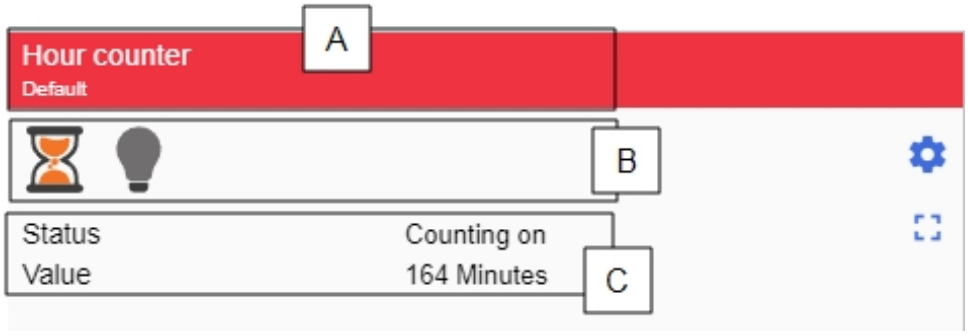
Counter alarm OFF

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*

Element	Description
B	**Status icons**  Counting  Counting, warning ON  Counting, warning ON acknowledged  Counting, alarm ON  Counting, alarm ON acknowledged  Counting, Inactivity alarm ON  Counting, Inactivity alarm ON acknowledged  Stop with alarm ON  Stop with alarm ON acknowledged  Stop
C	Shows the function status and the **Counter alarm mode** parameter
	**Drawer containing the Command icons:**  Reset  Acknowledge  Start counting  Stop counting
	Accesses the function parameters: • **Set counted warning threshold** • **Add to counted warning threshold** • **Set counted alarm threshold** • **Add to counted alarm threshold** • **Set time warning threshold** • **Add to time warning threshold** • **Set time alarm threshold** • **Add to time alarm threshold**

Element	Description
	Accesses the event settings
	Exports the report (xlsx, cvs, xml) that you will find in ***Report > History*** *For further information, see "History tab" on page 182*

Hour counter

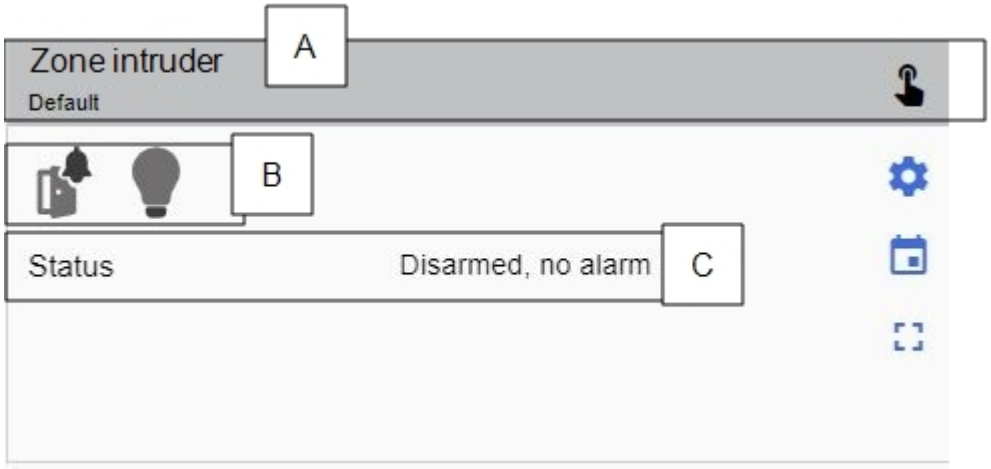


Hour counter ON

Element	Description
A	**Function status bar** *Note: see the relevant status icons below.*

Element	Description
B	**Status icons**  Counting OFF  Counting disabled, warning  Counting disabled, alarm  Counting disabled, alarm acknowledged  Counting ON  Counting OFF, warning  Counting ON, warning  Counting OFF, alarm  Counting ON, alarm  Counting OFF, alarm acknowledged  Counting ON, alarm acknowledged  Counting disabled
C	Shows the function status and counter value (decimals/measure unit)
	**Drawer containing the Command icons:**  Acknowledge  Disable ON  Disable OFF  Reset  Set value
	Accesses the function parameters: **Warning threshold** and **Alarm threshold**

Zone intruder alarm



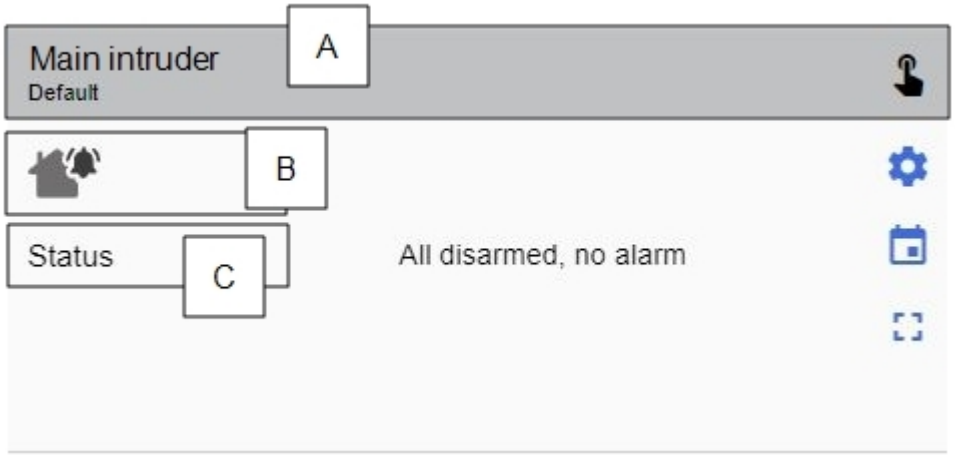
Zone intruder alarm OFF

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	"Status icons" on the facing page *Note: if more statuses are active, the relevant icons are shown together.*
C	Shows the alarm status and the running timers.
	Drawer containing the Command icons: Acknowledge Reset
	Accesses the function parameters: • **Arming timer** • **Disarming timer** • **Siren timer** • **Reset timer** • **Acknowledged with auto reset**
	Accesses the event settings

Status icons

	Disarmed, alarm ON
	Disarmed, alarm OFF
	Arming, alarm ON
	Arming, alarm OFF
	Arming, alarm was ON
	Arming ON, acknowledged
	Arming, alarm was ON acknowledged
	Armed, alarm OFF
	Armed, alarm was ON acknowledged
	Armed, alarm ON
	Armed, alarm was ON
	Armed, alarm ON acknowledged
	Disarming, alarm ON
	Disarming, alarm OFF
	Disarming, alarm was ON
	Disarming ON, acknowledged
	Disarming, alarm was ON acknowledged
	Reset
	Reset with timeout

Main intruder alarm



Main intruder alarm OFF

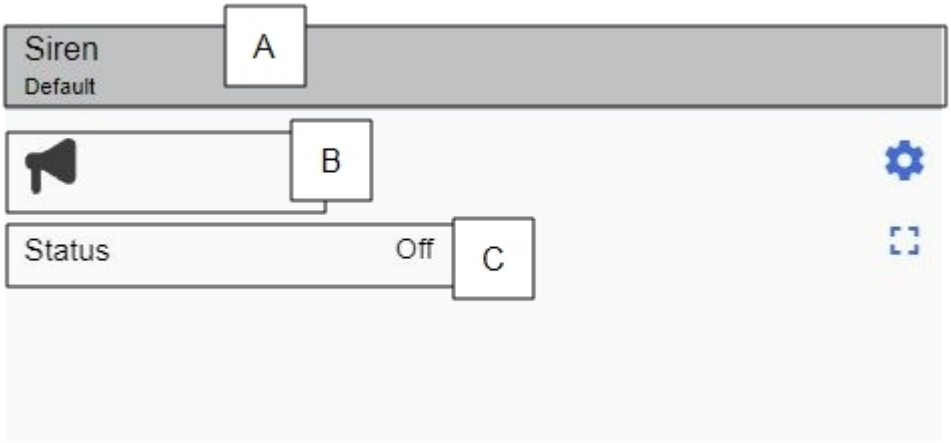
Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	"Status icons" below *Note: if more statuses are active, the relevant icons are shown together.*
C	Shows the alarm status and the running timers.
	Drawer containing the Command icons: Acknowledge Reset Arm Disarm
	Accesses the function parameters: **Reset timer**
	Accesses the event settings

Status icons

All zones reset

	All zones disarmed, alarm OFF
	Some armed, alarm ON
	Some disarming, alarm ON
	Some armed, alarm was ON
	Some disarming, alarm was ON
	Some arming, alarm ON
	Some arming, alarm was ON
	Some armed, alarm ON acknowledged
	Some disarming, alarm ON acknowledged
	Some armed, alarm was ON acknowledged
	Some disarming, alarm was ON acknowledged
	Some arming, alarm ON acknowledged
	Some arming, alarm was ON acknowledged
	Some reset
	Some armed OFF
	Some disarming OFF
	Some arming OFF
	Some disarmed ON
	All zones reset with timeout

Siren



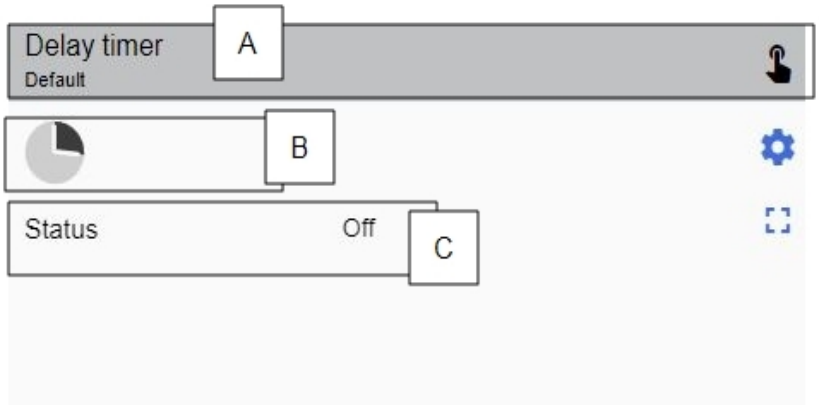
Siren OFF

Element	Description
A	**Function status bar**. *Note: see the relevant status icons below.*

Element	Description
B	**Status icons**  OFF   Group 1,2 or 3 ON    Group 1, 2 or 3 ON timer    Group 1, 2 or 3 time out   Reset  Reset with timeout *Note: if more statuses are active, the relevant icons are shown together.*
C	Shows the alarm status and the reset timeout.
	**Drawer containing the Command icons:**  Reset  Acknowledge
	Accesses the function parameters: • **Priority 1, 2 and 3 siren timers**, output activation timer (0 - 24 h, default 1 min) when the Siren function is triggered by an alarm function of the priority group 1. During the siren activation time the output "Siren status" is ON. *Note: it can be tacitly manually by using the Acknowledge/Reset command.* • **Reset timer,** sets the time period after which the alarm condition turns ON again (0 - 24 h. Default value: 1 min). *Note: the reset state can remain active for the duration of the scheduled reset timer. If the timer value is set to 0 seconds, the command is pulsed.*

Timers

Delay timer

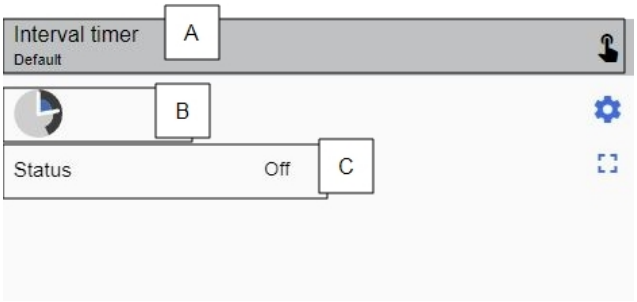


Delay timer OFF

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	**Status icons** OFF ON OFF (delay ON timer running) ON (delay OFF timer running) OFF (delay ON timer paused) ON (delay OFF timer paused)
C	Shows the function status and the count down of the delay ON/OFF timer

Element	Description
	**Drawer containing the Command icons:**  Pause / Resume  Disable ON  Disable OFF
	Accesses the function parameters: • **Delay ON Timer**, sets the delay timer before turning the output ON (0 -24 h. Default value: 1 minute) • **Delay OFF Timer**, sets the delay timer before turning the output OFF (0 -24 h. Default value: 1 minute)

Interval timer

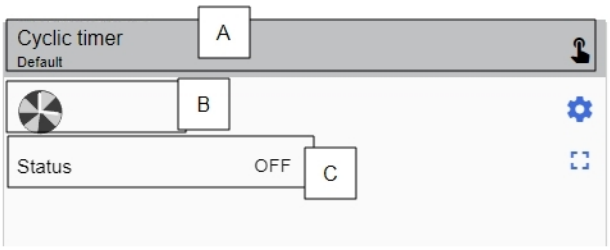


Interval timer OFF

Element	Description
A	 Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	**Status icons**  OFF  ON  ON (Interval timer running)  ON (interval timer paused)
C	Shows the function status and the count down of the delay ON/OFF timer .

Element	Description
	Drawer containing the Command icons:  Pause / Resume  Disable ON  Disable OFF
	Accesses the function parameters: **Interval Timer**, sets the delay before the output switching ON (0 - 24 h. Default value: 1 minute).

Cyclic timer

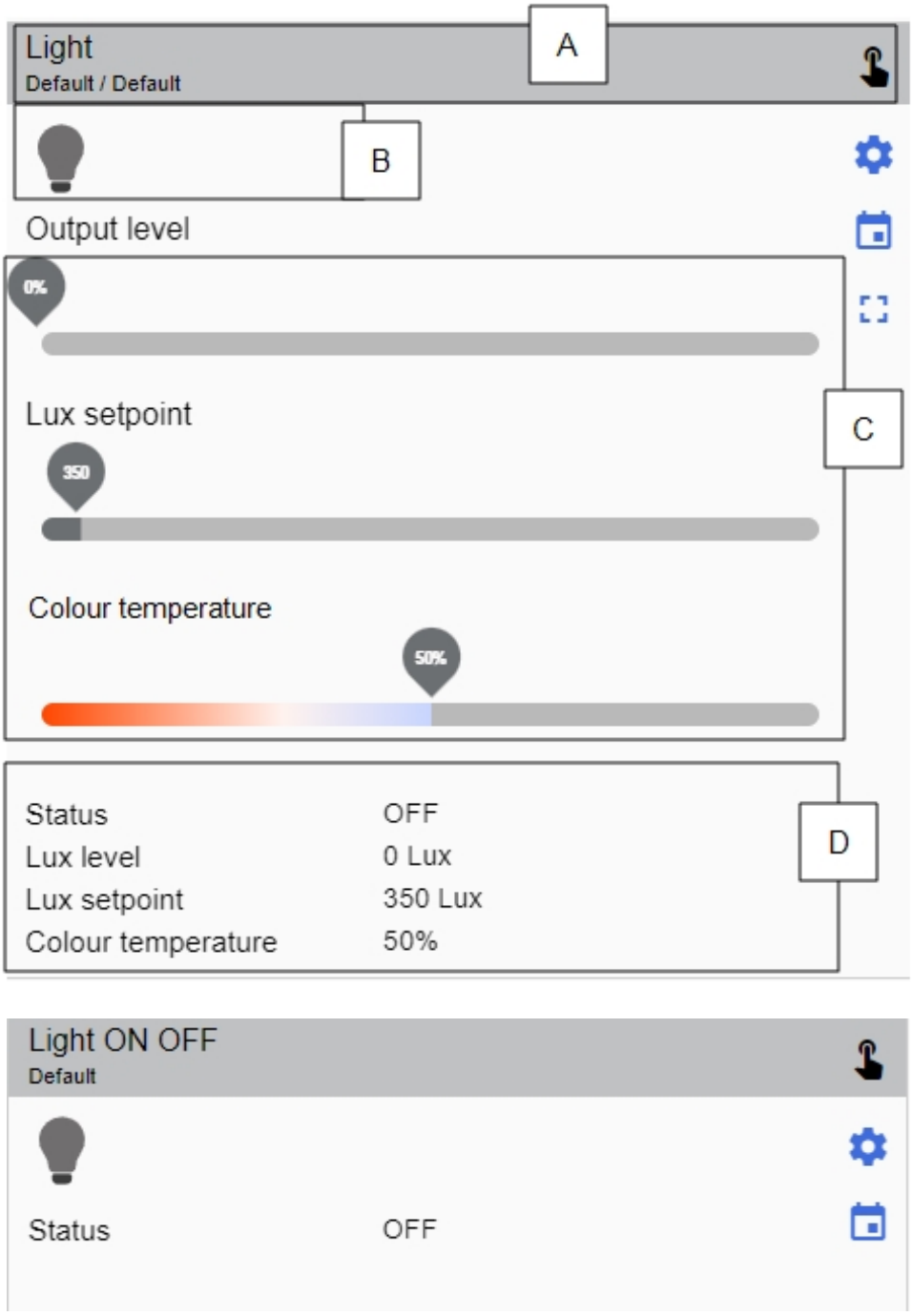


Cyclic timer ON

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	**Status icons** OFF ON OFF (OFF timer running) ON (ON timer running) OFF (OFF timer paused) ON (ON timer paused)
C	Shows the function status and the count down of the delay ON/OFF timer .
	Drawer containing the Command icons: Pause / Resume Disable ON Disable OFF
	Accesses the function parameters: • **Time ON,** sets the time period the output stays ON (0 - 24 h. Default value: 1 min) • **Time OFF,** sets the time period the output stays OFF (0 - 24 h. Default value: 1 min)

Light control modes

Light ON/OFF



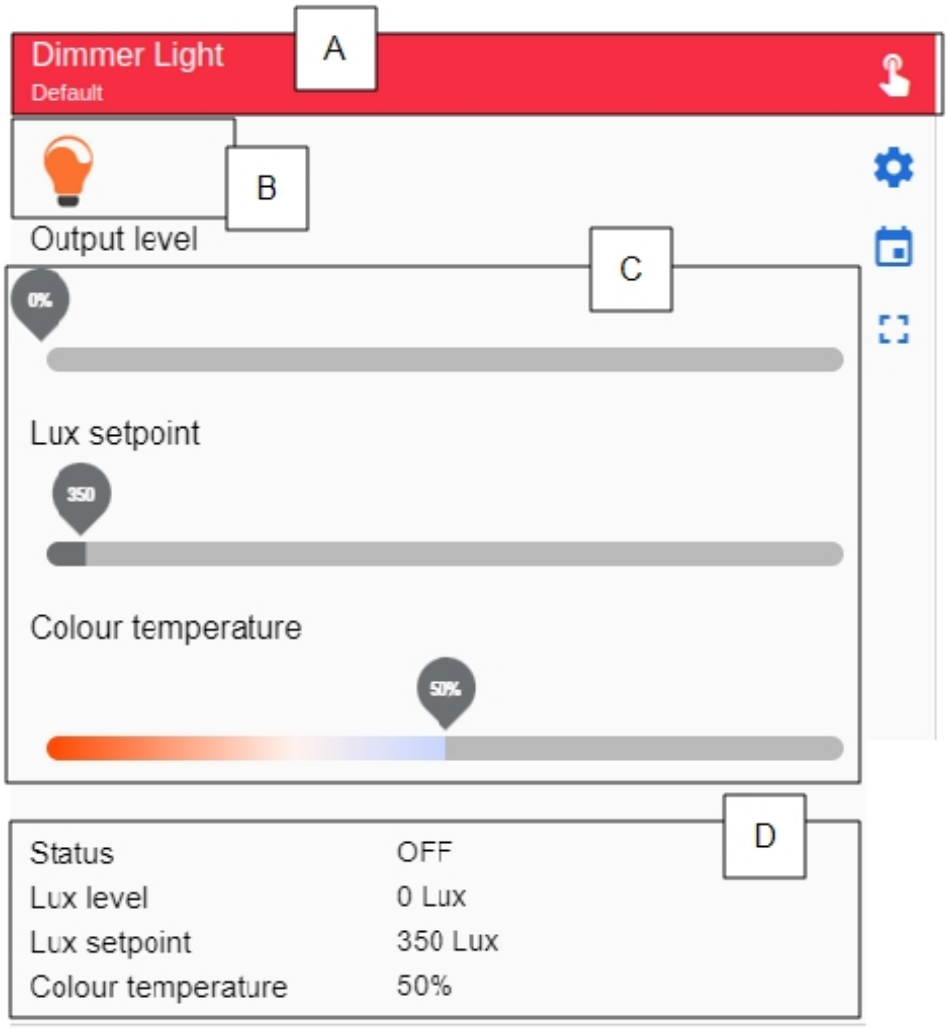
Examples of light control

Element	Description
A	 Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	"Status icons" below *Note: if more statuses are active, the relevant icons are shown together.*
C	Sliders to set light intensity and/or the colour temperature (if available).
D	Shows the function status and the levels you set through the sliders.
	Accesses the function parameters
	Accesses the event settings
	**Drawer containing the Command icons:**  Sets scenes

Status icons

	OFF
	ON
	ON (energy save timer running)
	OFF (automation disabled)
	ON (automation disabled)
	ON (forced ON)
	OFF (forced OFF)
	ON
	OFF

Dimmable light



Dimmable light OFF

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	"Status icons" on the facing page *Note: if more statuses are active, the relevant icons are shown together.*
C	Sliders to set the dimming level (10 - 100%) and the colour intensity/temperature (if you activate the tunable white from the UWP IDE).
D	Shows the function status and the levels you set through the sliders.
	Drawer containing the Command icons: Sets the light to the defined set points.

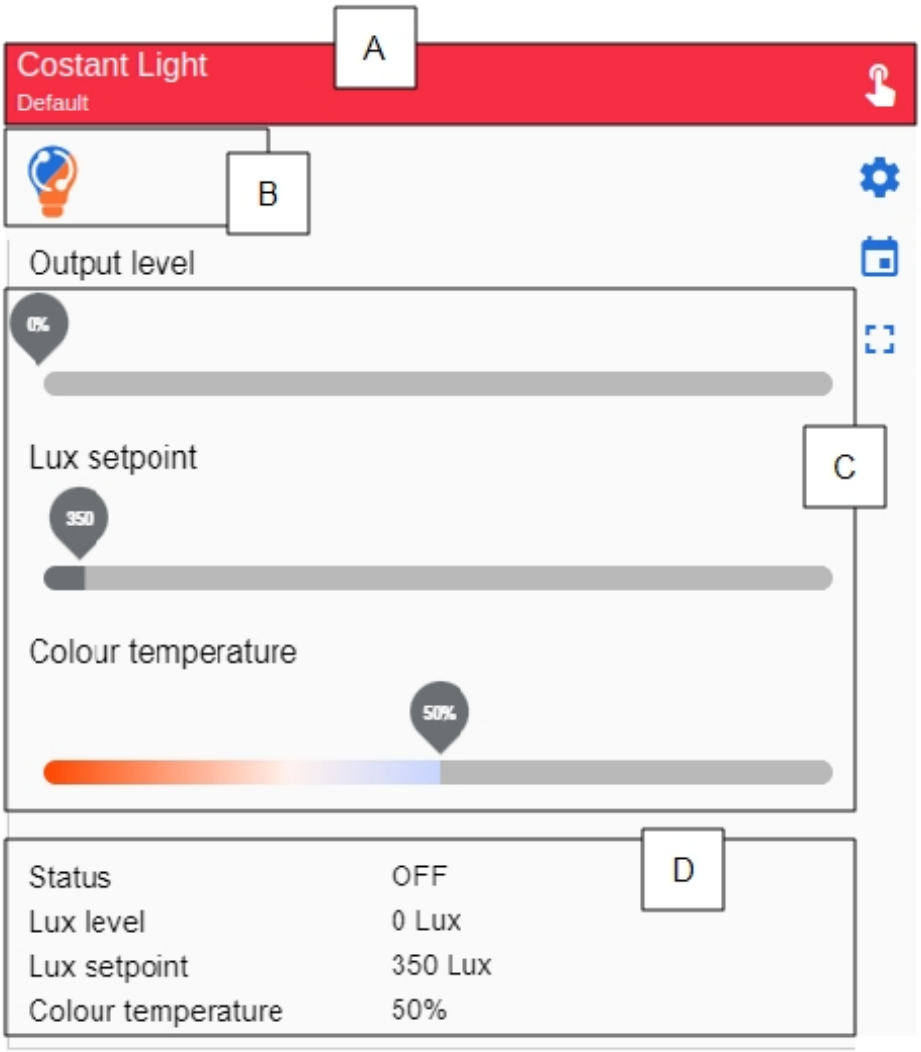
Element	Description
	Accesses the function parameters
	Accesses the event settings

Status icons

Note: the first icon changes according to the light control type (dimmer  *or dimmer + tunable white*  *).*

	OFF
	ON
	ON (energy save timer running)
	OFF (automation disabled)
	ON (automation disabled)
	ON (forced ON)
	OFF (forced OFF)
	ON
	OFF

Constant light



Constant light OFF

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	"Status icons" on the facing page *Note: if more statuses are active, the relevant icons are shown together.*
C	Sliders to set the light and the colour intensity/temperature (if you activate the tunable white from the UWP IDE).
D	Shows the function status and the levels you set through the sliders.
	Drawer containing the Command icons: Sets the light to the defined set points.

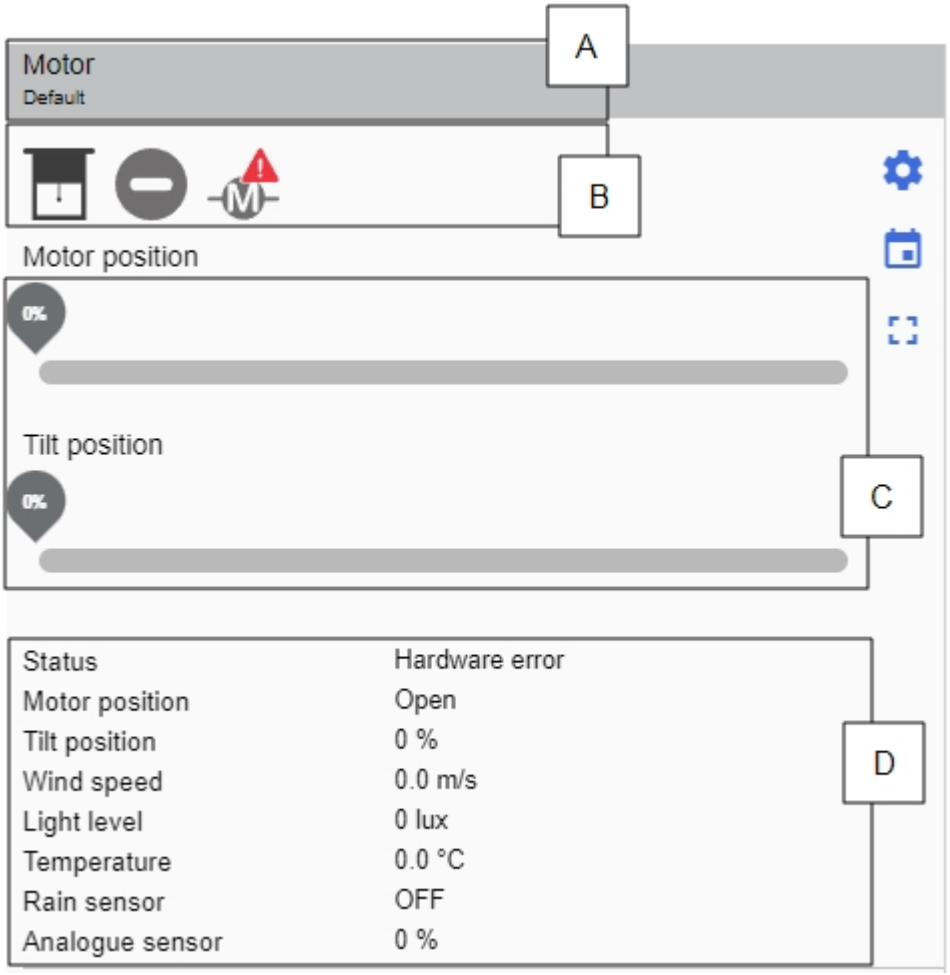
Element	Description
	Accesses the function parameters
	Accesses the event settings

Status icons

Note: the first icon changes according to the light control type (constant  *or constant + tunable white*  *).*

	OFF
	ON
	ON (energy save timer running)
	OFF (automation disabled)
	ON (automation disabled)
	ON (forced ON)
	OFF (forced OFF)
	ON
	OFF

Motor



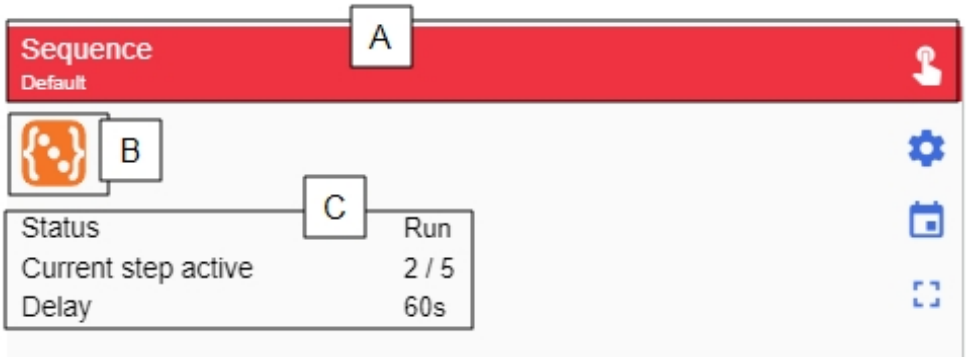
Motor OFF

Element	Description
A	**Function status bar**. *Note: see the relevant status icons below.*

Element	Description	
B	**Status icons**	
		Running
		Running to 100%
		Running to 0%
		Running free time
		Emergency is ON
		Forced
		Disable automation timer is running
		RTC automation is disabled
		Light level automation is disabled
		Wind automation is disabled
		Temperature automation is disabled
		Rain automation is disabled
		Digital control automation is disabled
		Analogue control automation is disabled
		Hardware error
		Steady
	Note: if more statuses are active, the relevant icons are shown together.	
C	Sliders to set the motor and the tilt position.	

Element	Description
D	Shows: • the motor status and position • the tilt position (%) • the wind speed • the light level • the temperature • the rain sensor status • the analogue sensor
	Drawer containing the Command icons:  Refresh position after a reset to 0 %  Refresh position after a reset to 100 %  Stop and update position  Start movement to 0 %  Start movement to 100 %  Tilt 100%  Tilt 0%
	Accesses the function parameters: • Function general settings • Motor settings • Wind automation settings • Light automation settings • Temperature automation settings • Rain automation settings • Analogue automation settings
	Accesses the event settings

Sequence

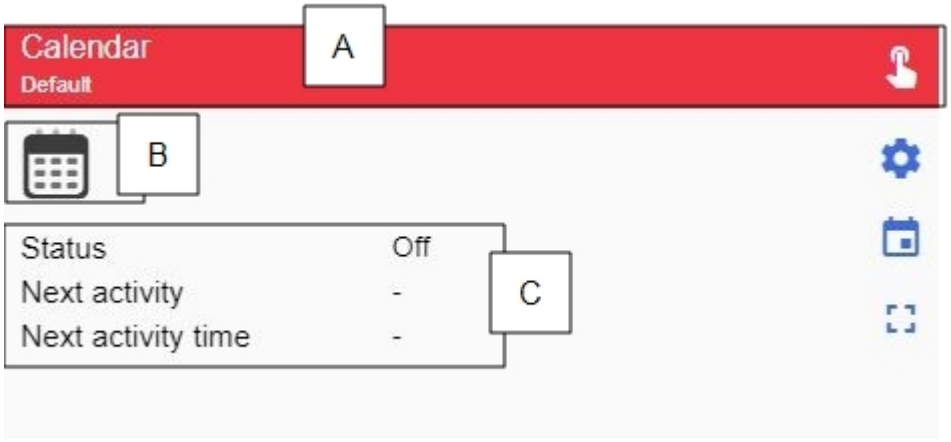


Sequence ON

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	**Status icons** OFF Run Recycling Paused OFF (automation disabled) Running (automation disabled) Recycling (automation disabled) Paused (automation disabled)
C	Shows the function status, the active step and the delay to the next step.

Element	Description
	**Drawer containing the Command icons:**  Pause / Resume  Stop  Start
	Accesses the function parameters: • **Default step delay** • **New start command option** • **Auto recycle** • **Timer recycle** (available only if the **Auto recycle** option is enabled) • **Timer disable** • **Steps** table (that opens the window for editing the steps) *For further information, see "Sequence procedures" on page 155*
	Accesses the event settings. *For further information, see "Sequence procedures" on page 155*

Calendar

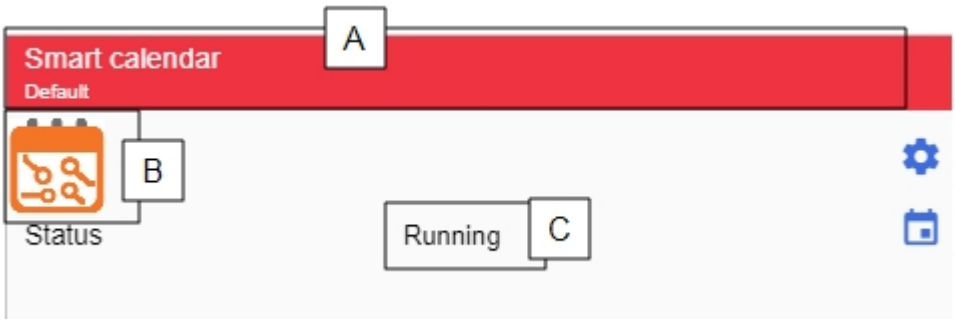


Calendar ON

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*
B	**Status icons** OFF ON OFF (disable, active timeout) ON (disable, active timeout) OFF (disabled, with timeout) ON (disabled, with timeout) OFF (forced) ON (forced)
C	Shows the event times

Element	Description
	**Drawer containing the Command icons:**  Disable ON  Disable OFF  Force ON  Force OFF
	Accesses the function parameters: • **Enable calendar event at start up** • **Disable timer,** sets the time period after which the Disable ON condition is deactivated (0 - 24 h. Default value: 1 minute). *For further information, see "Calendar procedures" on page 160*
	Accesses the event settings *For further information, see "Calendar procedures" on page 160*

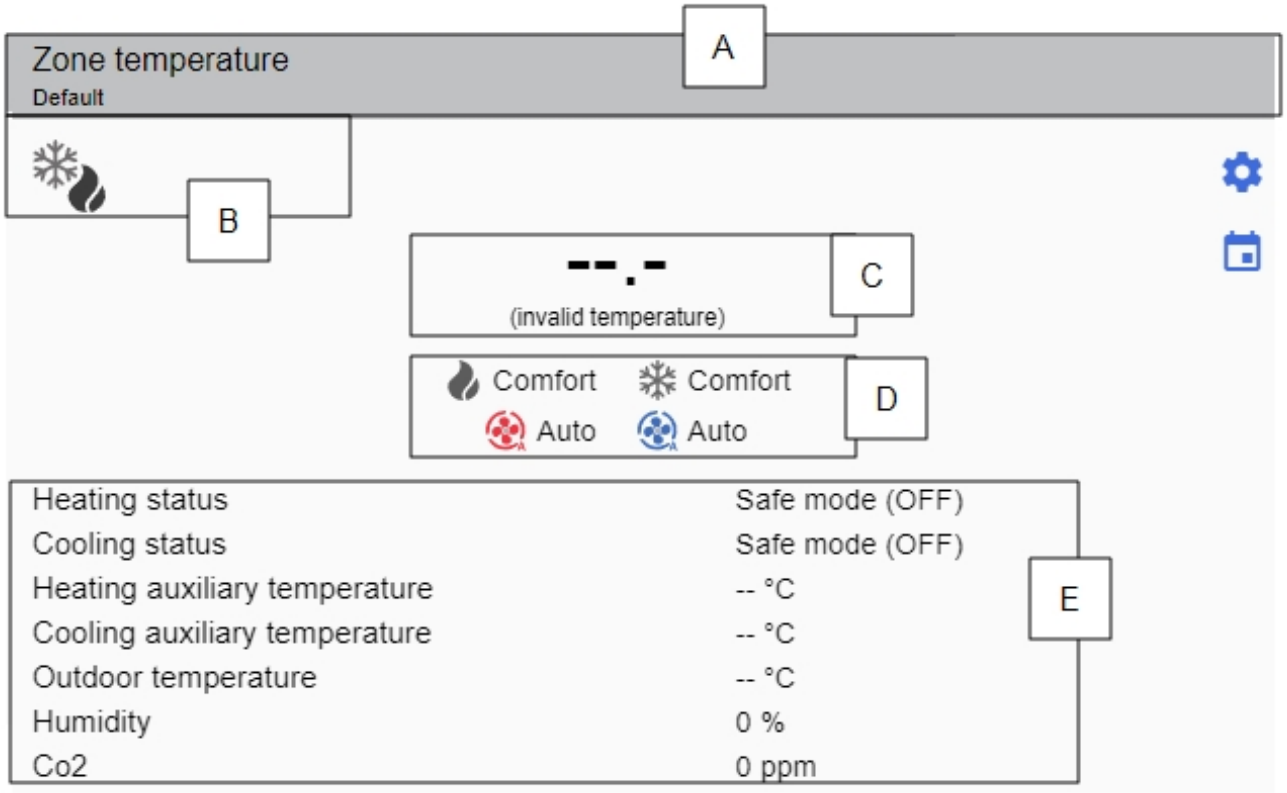
Smart calendar



Smart calendar ON

Element	Description
A	**Function status bar**. *Note: see the relevant status icons below.*
B	**Status icons** Disabled Running Disabled, timeout running
C	Shows the function status.
	Accesses the function parameters: **Timer disable** *For further information, see "Smart calendar procedures" on page 154*
	Accesses the event settings *For further information, see "Smart calendar procedures" on page 154*

Zone temperature



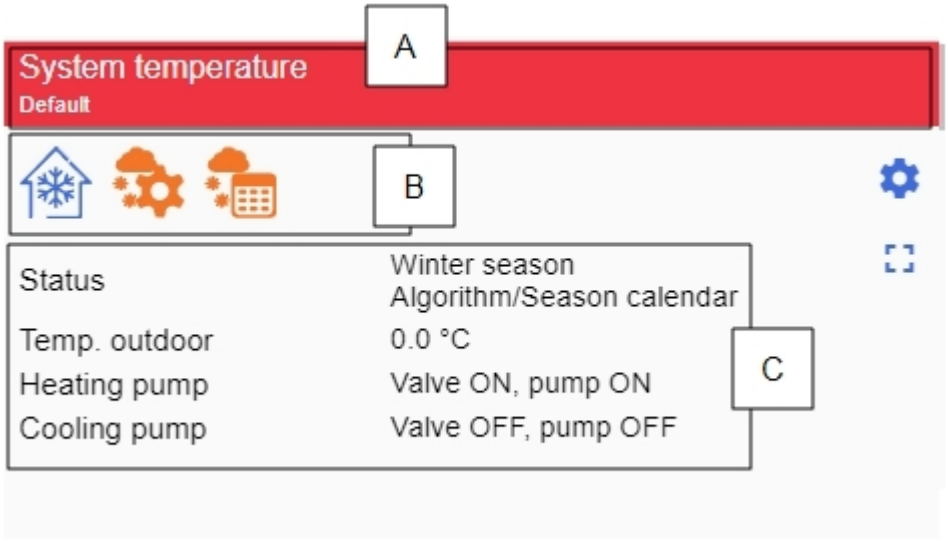
Zone temperature OFF

Element	Description
A	**Function status bar** *Note: see the relevant status icons below.*
B	**Status** icons. *For further information, see the table below.*
C	Shows the room temperature and the relevant measure unit (°C or °F)
D	Changes the heating/cooling set point and the fan speed. *Notes:* • *the set point icons change colour according to the control type (e.g., when the function is heating, the flame is red; if the function stops heating, the flame becomes grey).* • *the fan icons change according to the speed selected.*
E	Control status
	Accesses the function parameters
	Accesses the event settings

Function statuses

Status	Heating	Cooling
Deactivated (OFF)	No icon	
Controlling S1, 2, 3, manual (controlled status OFF)		
Controlling S1, 2, 3, manual (controlled status ON)		-
Heating/Cooling fan coil OFF	No icon	
Heating/Cooling fan coil (AUTO)		
Heating/Cooling fan coil speed 1 (manual)		
Heating/Cooling fan coil speed 2 (manual)		
Heating/Cooling fan coil speed 3 (manual)		
Safe mode (controlled status OFF)		
Safe mode (controlled status ON)		
Forced ON (Antifreeze)		-
Forced ON (Auxiliary function)		
Forced ON		
Forced OFF (Auxiliary function)		
Forced OFF		
Forced OFF (System function)		
Disable automation		
Disable automation timer in progress		

System temperature



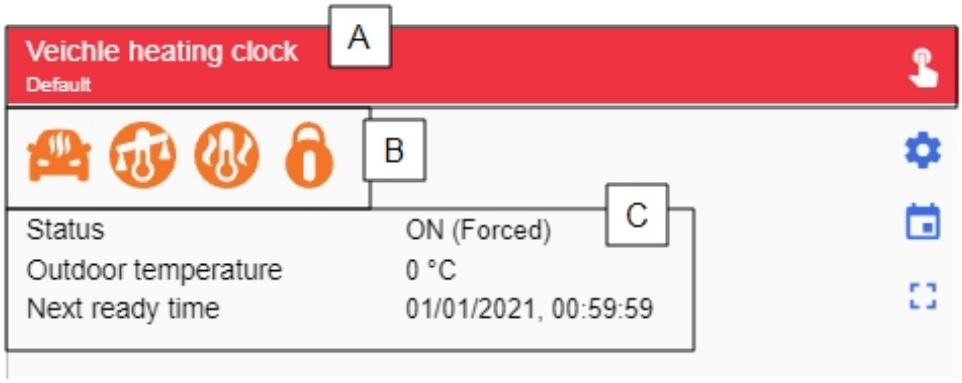
System temperature ON

Element	Description
A	**Function status bar** *Note: see the relevant status icons below.*

<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>B</td><td>
<u>Status icons</u>
<table>
<tr><td>  </td><td>Mid season (calendar)</td></tr>
<tr><td>  </td><td>Winter season (calendar)</td></tr>
<tr><td>  </td><td>Summer season (calendar)</td></tr>
<tr><td>  </td><td>Mid season (algorithm)</td></tr>
<tr><td>  </td><td>Winter season (algorithm)</td></tr>
<tr><td>  </td><td>Summer season (algorithm)</td></tr>
<tr><td>  </td><td>Mid season (FORCED)</td></tr>
<tr><td>  </td><td>Winter season (FORCED)</td></tr>
<tr><td>  </td><td>Summer season (FORCED)</td></tr>
<tr><td>  </td><td>Disabled automation</td></tr>
<tr><td>  </td><td>Disable automation timer in progress</td></tr>
</table>
Note: if more statuses are active, the relevant icons are shown together.
</td></tr>
<tr><td>C</td><td>
Shows the function status and the command type.
<table>
<tr><th>If from the IDE you use...</th><th>Then in the Web App widget you will see...</th></tr>
<tr><td>the algorithm to determine the season</td><td>the temperature used for the calculation</td></tr>
<tr><td>the pump/valve option</td><td>the pump/valve status
delay timer ON/OFF
Note: both for cooling and heating mode.</td></tr>
<tr><td>automatisms</td><td>no timer disable</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td></td><td>Drawer containing the Command icons:
  Force mid season
  Force winter season
  Force summer season
  Remove force</td></tr>
<tr><td> 
  </td><td>Accesses the function parameters:
• Disable timer
• Parameters according to the control type selected from the IDE:
<table><tr><th>Season calendar</th><th>Algorithm control</th><th>Pump/Valve control</th></tr><tr><td>• Winter start date
• Winter end date
• Summer start date
• Summer end date</td><td>• Winter season set point
• Summer season set point
• DMD time
• Short time average samples
• Long time average samples</td><td>• Pump delay heating
• Valve delay heating
• Pump delay cooling
• Valve delay cooling</td></tr></table>• Winter and summer dates (if the calendar is selected from the IDE)</td></tr>
</table>

Vehicle heating



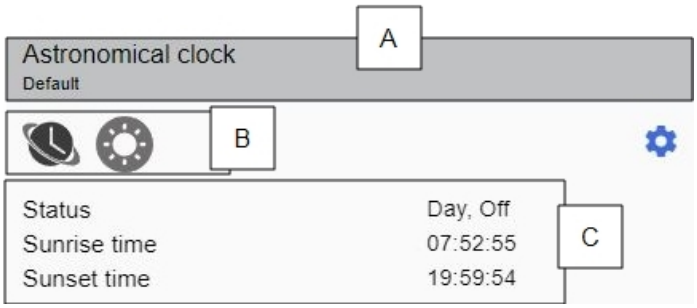
Vehicle heating ON

Element	Description
A	Toggle to start or stop a function. The toggle command changes the **Function status bar** colour as follows. *Note: see the relevant status icons below.*

Element	Description
B	**Status icons**  Output OFF, Algorithm enabled  Output ON, Algorithm enabled  Output OFF, Algorithm disabled  Output OFF, Algorithm disabled with timeout  Output OFF, Comparator mode  Output ON, Comparator mode  Output ON, Comparator mode with timeout  Output OFF, Manual mode  Output ON, Manual mode  Output ON, Manual mode with timeout  Output ON, Force ON  Output OFF, Force OFF
C	Shows the function status, the external temperature, the ready time (from the local calendar) and timers (if enabled).
	**Drawer containing the Command icons:**  Force ON  Force OFF  Comparator mode  Manual mode  Algorithm mode *Note: these commands are toggle buttons. If you click one of these icons, it changes colour (orange = command enabled; blue = command disabled).*

Element	Description
	Accesses the function parameters: • **Temperature 1** • **Temperature 2** • **Advance time 1** • **Advance time 2** • **Temperature fail state** • **Comparator mode timer** • **Manual mode timer** • **Disable algorithm timer**
	Accesses the event settings. *For further information, see "Vehicle heating procedures" on page 159*

Astronomical clock



Astronomical clock OFF

Element	Description
A	**Function status bar**. *Note: see the relevant status icons below.*
B	**Status icons** Day Night Day/Night calculation error Day (calculation disabled) Night (calculation disabled) Day (calculation disabled with timer) Night (calculation disabled with timer) Night (forced) Day (forced)
C	Shows the function status, the sunset and the sunrise times.

Element	Description
	Accesses the function parameters: • **Sunrise/sunset offset,** sets the offset to apply to the sunrise/sunset time (default value: 0).The offset value can be from -120 minutes to + 120 minutes: this value is added to or removed from the calculated sunrise/sunset time. • **Disable timer,** sets the time period after which the Disable ON condition is deactivated (0 - 24 h). *Note: the default value is 1 minute.* • **Sunrise/sunset angle (°),** shows the default value (0.833°) according to the angle of the sun below the horizon**.**  *Sunrise and sunset angles*

Note: the coordinates are needed to calculate the sunrise/sunset; otherwise, the calculation is not correct.

Procedures

Content

This chapter includes the following topics:

Astronomical clock procedures 152
Switch procedures 152
Smart calendar procedures 154
Sequence procedures 155
Alarm procedures 156
Comparator procedures 156
Counter procedures 158
Vehicle heating procedures 159
Calendar procedures 160
Timers procedures 160
System temperature procedures 160
Zone temperature procedures 162
Light procedures 162
Modbus outputs 164

Astronomical clock procedures

Manage the settings

1. From the **Astronomical clock** widget, click to access the function settings.
2. Set the parameters contained in the two tabs.
3. Click to save the changes.

   For further information, see UWP IDE manual.

Switch procedures

Create an event

1. From the **Switch** widget, click to access the event settings.
2. Click to open the options
3. Click to add an event.
4. Enter the information.
5. From the **Action** field, select the action to be executed according to the schedule.

6. From , click to save the changes.

Edit an event

1. From the **Switch** widget, click to access the event settings.
2. Change the existing event details.
3. From , click to save the changes.

Manage the settings

1. From the **Switch** widget, click to access the function settings.
2. Set the timers.
3. Click to save the changes.

For further information, see UWP IDE manual.

Smart calendar procedures

Create an event

1. From the **Smart Calendar** widget, click  to access the event settings.
2. Click  to add an event
3. Click  to open the function list.
4. Click  to add functions to the list.
5. Set the function and the event parameters.
6. Click  to save the changes.

Edit an event

1. From the **Smart Calendar** widget, click  to access the event settings.
2. Click  to open the function list included in the event.
3. Change the desired parameters or click  to add/remove a function to/from the list.
4. Click  to save the changes.

   *Note: you can disable the event from the **Enable** check box.*

Manage the settings

1. From the **Smart Calendar** widget, click  to access the function settings.
2. Set the timer.
3. Click  to save the changes.

   For further information, see UWP IDE manual.

Sequence procedures

Create an event

1. From the **Sequence** widget, click to access the event settings.
2. Click to open the options.
3. Click to add an event.
4. Enter the information.
5. From the **Action** field, select the action to be executed according to the schedule.
6. From , click to save the changes.

Edit an event

1. From the **Sequence** widget, click to access the event settings.
2. Change the existing event details.
3. From , click to save the changes..

Manage the steps

1. From the **Sequence** widget, click to access the function settings.
2. Click **Steps** to see the relevant settings.
3.

If you want to...	Then...
Change the order of the steps	Enable the **Drag and drop** option
Add steps	Click from the bottom bar
Restore factory values	Click from the bottom bar
Remove steps	Click from the row you want to delete
Edit the parameters of existing steps	Change the desired values and click to save them

4. Click to save all the changes.

   Notes:

   - *users with writing permissions can also access the list of steps defined via IDE. They can thus add, remove, reorder or change any step.*
   - *If in the list there is at least a function that a user is not allowed to read/write, it will not be possible to change ANY step (a message will warn the user). The functions that a user is not allowed to read/write appear in the list disabled.*

For further information, see UWP IDE manual.

Alarm procedures

Create an event

1. From the **Alarm** widget, click to access the event settings.
2. Click to open the options
3. Click to add an event.
4. Enter the information.
5. From the **Action** field, select the action to be executed according to the schedule.
6. From , click to save the changes.

Edit an event

1. From the **Alarm** widget, click to access the event settings.
2. Change the existing event details.
3. From , click to save the changes.

Manage the settings

1. From the **Alarm** widget, click to access the function settings.
2. Set the timers.
3. Click to save the changes.

For further information, see UWP IDE manual.

Comparator procedures

Create an event

1. From the **Comparator** widget, click to access the event settings.
2. Click to open the options
3. Click to add an event.
4. Enter the information.
5. From the **Comparator mode** field, select the action to be executed according to the schedule.
6. From , click to save the changes.

Edit an event

1. From the **Comparator** widget, click to access the event settings.
2. Change the existing event details.
3. From , click to save the changes.

Manage the settings

1. From the **Comparator** widget, click to access the function settings.
2. Set the **Comparator type** and **Function** settings.
3. Click to save the changes.

   For further information, see UWP IDE manual.

Counter procedures

Create an event

1. From the **Zone temperature** widget, click to access the event settings.
2. Click to open the options.
3. Click to add an event.
4. Enter the information.
5. From the **Action** field, select the action to be executed according to the schedule.
6. From , click to save the changes.

Edit an event

1. From the **Zone temperature** widget, click to access the event settings.
2. Change the existing event details.
3. From , click to save the changes.

Manage the settings

1. From the **Zone temperature** widget, click to access the function settings.
2. Set the rollover counter.
3. Click to save the changes.

For further information, see UWP IDE manual.

Vehicle heating procedures

Create an event

1. From the **Vehicle heating** widget, click  to access the event settings.
2. Click  to open the options.
3. Click  to add an event.
4. Enter the information.
5. From the **Action** field, select the action to be executed according to the schedule.
6. From  , click  to save the changes.

Edit an event

1. From the **Vehicle heating** widget, click  to access the event settings.
2. Change the existing event details.
3. From  , click  to save the changes.

Manage the settings

1. From the **Vehicle heating** widget, click  to access the function settings.
2. Set the temperature and comparator settings.
3. Click  to save the changes.

   For further information, see UWP IDE manual.

Calendar procedures

Create an event

1. From the **Calendar** widget, click to access the event settings.
2. Click to add an event.
3. Enter the information.
4. From the **Output** field, select the action to be executed according to the schedule.
5. From , click to save the changes.

Edit an event

1. From the **Calendar** widget, click to access the event settings.
2. Change the desired parameters.
3. From , click to save the changes.

   *Note: you can disable the event from the **Enable** check box.*

Manage the settings

1. From the **Calendar** widget, click to access the function settings.
2. Set the timer.
3. Click to save the changes.

   For further information, see UWP IDE manual.

Timers procedures

Manage the settings

1. From the **Timer** widget, click to access the function settings.
2. Set the timers.
3. Click to save the changes.

   For further information, see UWP IDE manual.

System temperature procedures

Manage the settings

1. From the **System temperature** widget, click to access the function settings.
2. Set the parameters contained in the three tabs.

3. Click  to save the changes.
   For further information, see UWP IDE manual.

Zone temperature procedures

Create an event

1. From the **Zone temperature** widget, click to access the event settings.
2. Click to open the options.
3. Click to add an event.
4. Enter the information.
5. From the **Show All** field, select the action to be executed according to the schedule.
6. From , click to save the changes.

Edit an event

1. From the **Zone temperature** widget, click to access the event settings.
2. Change the existing event details.
3. From , click to save the changes.

Manage the settings

1. From the **Zone temperature** widget, click to access the function settings.
2. Set the parameters contained in the three tabs.
3. Click to save the changes.

   For further information, see UWP IDE manual.

Light procedures

Create an event

1. From the **Light** widget, click to access the event settings.
2. Click to open the options
3. Click to add an event.
4. Enter the information.
5. From the **Action** field, select the action to be executed according to the schedule.
6. From , click to save the changes.

Edit an event

1. From the **Light** widget, click  to access the event settings.
2. Change the existing event details.
3. From  , click  to save the changes.

Manage the settings

1. From the **Light** widget, click  to access the function settings.
2. Set the timers.
3. Click  to save the changes.

   For further information, see UWP IDE manual.

Modbus outputs

Create an event

1. From the **Modbus output** widget, click to access the event settings.
2. Click to open the options
3. Click to add an event.
4. Enter the information.
5. From the **Action** field, select the action to be executed according to the schedule.
6. From , click to save the changes.

Edit an event

1. From the **Modbus output** widget, click to access the event settings.
2. Change the existing event details.
3. From , click to save the changes.

Manage the settings

1. From the **Modbus output** widget, click to access the function settings.
2. Set the timers.
3. Click to save the changes.

For further information, see UWP IDE manual.

Alarms page

Content

This chapter includes the following sections:

How to access the Alarms page 166
Alarms page tabs 167
Things to know 172

How to access the Alarms page

(only for administrators)

1. Click ☰ to open the **Main menu**.
2. Select **Alarms** ›

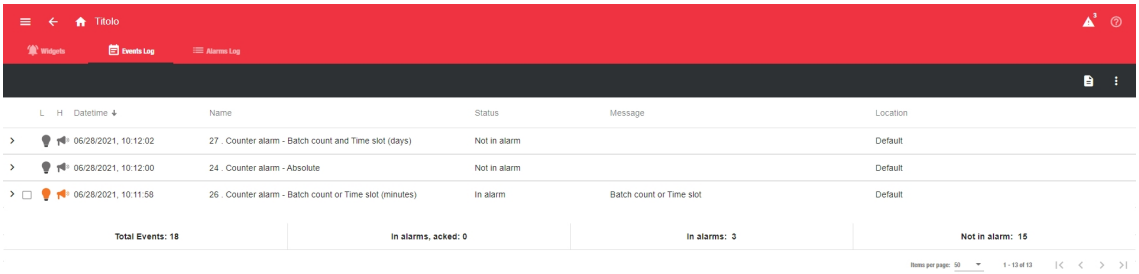
Alarms page tabs

Content

This chapter includes the following topics:

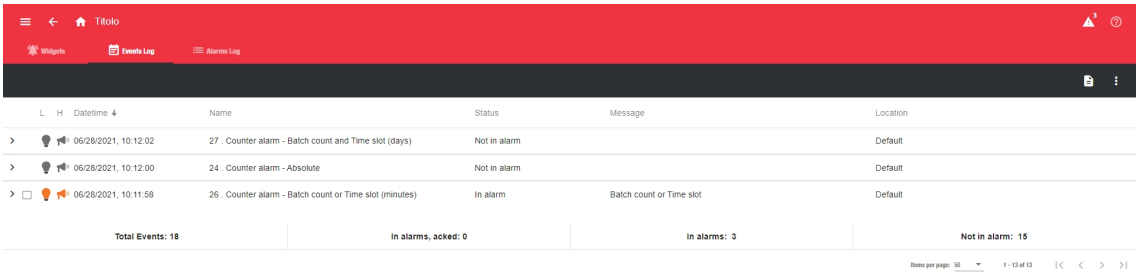
Main page 168
Events log tab 169
Widgets tab 170
Alarms log tab 171

Main page



Icon	Description
	The active alarms' counter. If you click it, you will be redirected to the **Events log** tab.
	Widgets tab.
	Events log tab (default page).
	Alarms log tab.

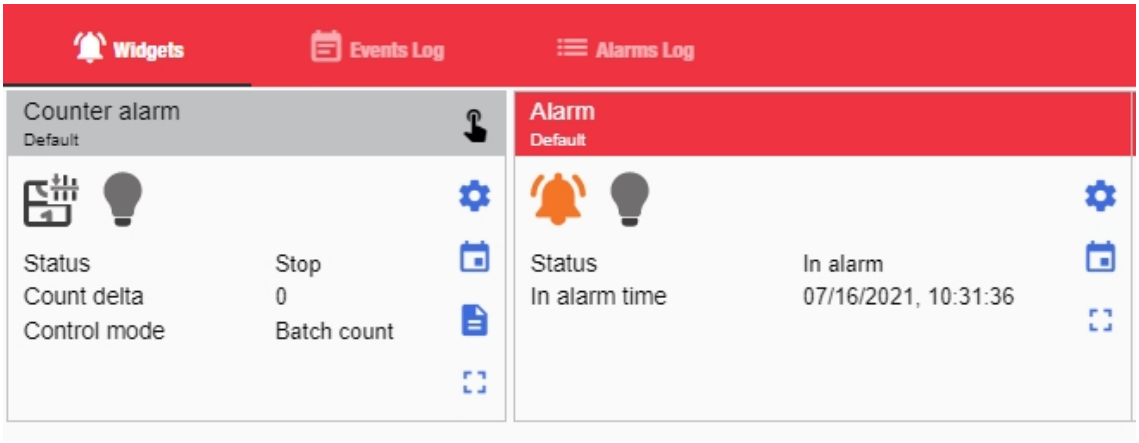
Events log tab



From this tab you can see the list of all the alarm events, chronologically ordered and grouped by functions. Each row represents the last alarm status of a function. Any new alarm associated to a new event is added to the list.

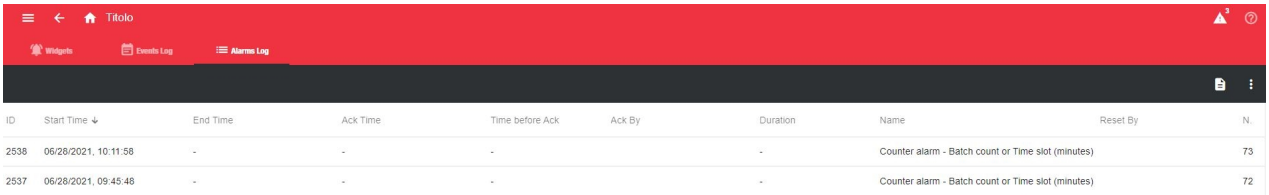
Icon	Description
	Generates a report.
	Filter options. When you filter, the icon appears to link the **Events log** tab information to the **Alarms log** tab. The linked pages can be managed separately.
›	Opens the function event list and the relevant details. From the first row you can see information about the last event, the current status, and any messages (entered from the UWP IDE).
L / H	Light and horn status.
☐	Activates other commands: (acknowledgement of the selected alarms) (reset of the selected alarms)
Description	Date/time of the event
Name	Active alarm function name
Status	Alarm function status
Message	Message entered in the function options
Location	Alarm function location

Widgets tab



From this tab, you can see the **Alarm function** widgets.

Alarms log tab



From this tab you can see the list of all the alarm functions' events.

Icon	Description
	Generates a report.
	Filter options. From the **Events log** tab you can link ( ) the information to the **Alarms log** tab. The linked pages can be managed separately.

Things to know

Content

This chapter includes the following topics:

What is an alarm 173
Types of alarm function 174

What is an alarm

The alarm warns about the change/variation of a status, graphically represented by:

- the icon  that appears in the navigation bar;
- the widget colour;
- the widgets contained in the alarms dashboard.

There are the two following categories of alarms:

Category	Configuration	Types
Alarm function	From software	1. Generic alarm 2. Water[1] 3. Smoke[2] 4. Intruder[3] 5. Hour counter 6. Siren. *For further information, see Types of alarm function*
Monitoring alarm	By the user	*For further information, see "Descriptions of the functions" on page 96*

1Included in the Alarm function
2Included in the Alarm function
3See Main or Zone intruder function

Types of alarm function

Alarm function

The Alarm function warns you when an event occurs. Events can be related to smoke alarms, water leakage alarms or to any other event you need to be warned of.

For further information, see Functions > Function widget elements > "Alarm" on page 111

Water alarm function

From the UWP IDE, you can configure a basic Water alarm function in order to monitor water flood on the floor.

From the Web App, you can monitor the function by adding the **Alarm** function widget.

Smoke alarm function

From the UWP IDE, you can configure a basic Smoke alarm function in order to be warned about smoke in the house.

From the Web App, you can monitor the function by adding the **Alarm** function widget.

Main and zone intruder alarm function

The intruder alarm function is used to protect the house against burglars and undesired intruders.

To create an Intruder alarm function you have to create at least one Zone alarm function. Each zone function might correspond to a part of the house that has to be monitored or just to a single sensor. Then, you have to create a Main alarm function, used to manage all the zone functions.

This functions is used for arming/disarming and collecting all the zone status.

From the Web App, you can monitor the function by adding the relevant widget.

For further information, see Functions > Function widget elements > "Zone intruder alarm" on page 118 and "Main intruder alarm" on page 120

Hour counter function

The purpose of the Hour counter function is to count the hours a function output has been ON, since the last reset.

It is typically used in the Lighting control for preventive replacement of fluorescent light tubes before they burning out and for keeping track of HVAC (Heating – Ventilation – Air conditioner) pump running hours (for early replacement and for planning maintenance).

From the Web App, you can monitor the function by adding the relevant widget.

For further information, see Functions > Function widget elements > "Hour counter" on page 116

Siren alarm function

The Siren alarm function allows you to manage an output when an alarm is detected.

It allows you to have the maximum flexibility for the activation of the output and to use a single output signal as a common output for more alarms.

From the Web App, you can monitor the function by adding the relevant widget.

For further information, see Functions > Function widget elements > "Siren" on page 122

Counter alarm function

The **Counter alarm** function permits to implement control functionalities on counter variables. The function input is a counter signal and/or the output status of a counter function.

Note: the input variable can just increment; any other situation (e.g., rollover) have to be managed manually.

For further information, see Functions > Function widget elements >"Counter alarm" on page 113

Reports

Content

This chapter includes the following sections:

How to access the report page 176
Report page tabs 177
Things to know 183
Procedures 185

How to access the report page

1. From the Navigation bar, click ☰ to open the **Main menu**.
2. Select **Reports**.

Report page tabs

Content

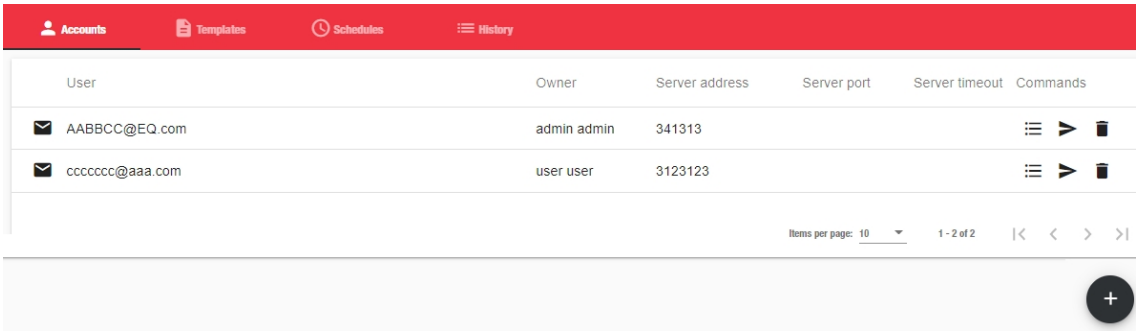
This section includes the following topics:

Main page 178
Accounts tab 179
Schedules tab 180
Templates tab 181
History tab 182

Main page

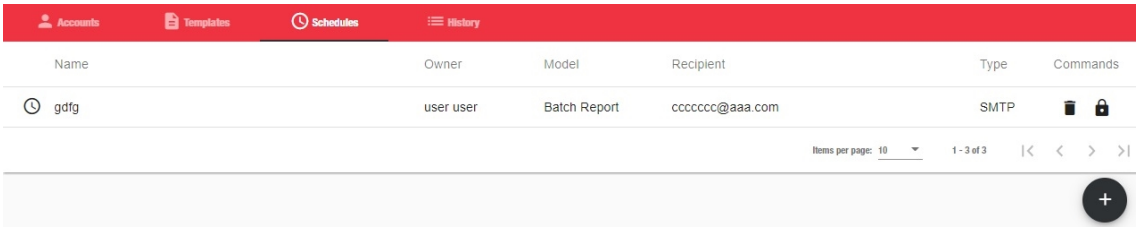
Tab	Description
Accounts	You can manage the FTP/SMTP accounts to which the report has to be sent, also through scheduling.
Schedules	The reports can be generated automatically through scheduling (see "Schedule a report " on page 189).
Templates	You can create new Reports manually (see "Create a template" on page 190).
History	You can check the list of Reports, which have been already generated (see "History tab" on page 182).

Accounts tab



Element	Description
User	Recipient's email
Owner	Only for administrators
Server address	SMTP address
Server port	SMTP port
Server timeout	Timeout (s)
Commands	Shows the logs. Sends the request. Deletes the item.
	Selects the items per page.
	Navigates the pages.
	Creates an account (see "Create an FTP/FTPS account " on page 186 and "Create an SMTP account " on page 187). *Note: the administrator can assign the account to a user.*

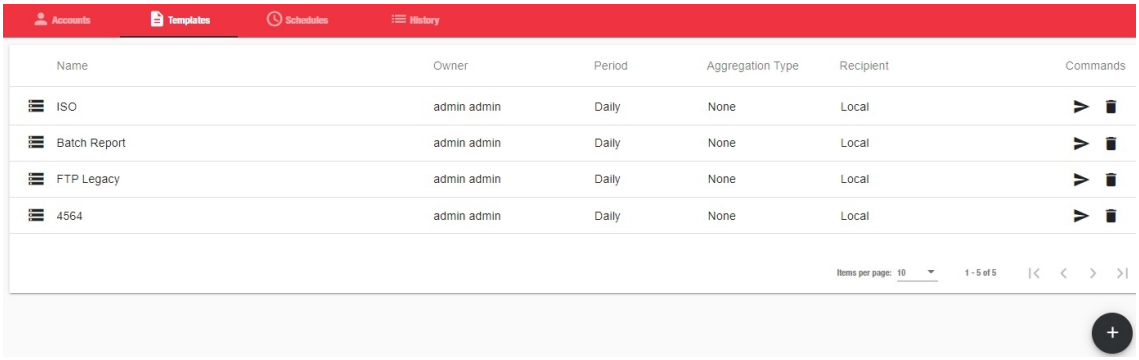
Schedules tab



Element	Description
User	Recipient's email
Server address	SMTP address
Server port	SMTP port
Server timeout	Timeout (s)
Commands	Creates a template / modifies an existing one. Sends the request. Deletes the item.
	Selects the items per page.
	Navigates the pages.
	Creates a schedule (see "Schedule a report " on page 189).

Note: the administrators sees all the schedules and can remove ( ) or disable (select the schedule and click) them. The other users only see their schedules but can modify and enable again the schedules the administrator has disabled.

Templates tab



Element	Description
Name	Click the icon to create a new template / modify an existing one.
Owner	Template information
Period	
Aggregation period	
Recipient	
Commands	Sends the request. Deletes the item.
	To select the items per page.
	Navigates the pages.
	Creates a template (see "Create a template" on page 190).

Note: users only see their own templates. However, administrators can assign the visibility of their templates to another user.

History tab

This tab shows the list of reports according to the users' permissions.

Column	Icon	Description
Right (report status)		Report problem
		Report queued
		Report in progress
		Report completed
		Report completed and sent (if it is meant to be sent[1])
		[2]Report creation stopped
First on the right (commands)		Regenerates an existing report. It is available only when the report: • is On Demand • is completed, delivered or in error • is sent to local server • is not available on the disk
		Downloads an available [3]local report
		[2]Stops a report creation *Note: administrators can stop any report. Users can only stop their own reports.*
Second on the right (type of report sending)		[3]Report configured to be sent to local server
		[1]Report configured to be sent by e-mail
		Report configured to be sent to FTP/FTPS
Third on the right (type of report creation)		Report scheduled
		Report generated manually

Things to know

Content

This chapter includes the following topics:

What is a report 184

What is a report

A report is a file containing a log of data or events related to a determined period of time.

It is based on a model defined by the user and it can be downloaded manually or sent automatically to an FTP/FTPS/SFTP server or to an email address through SMTP.

Procedures

Content

This section includes the following topics:

Create an FTP/FTPS account 186
Create an SMTP account 187
Create an SFTP account 188
Schedule a report 189
Create a template 190
Re-generate a report 192

Create an FTP/FTPS account

1. Access the **Reports** page (> **Reports**).
2. From the Accounts tab, click .
3. From the Account type list, select the FTP or the FTPS account.
4. Fill in the fields described below:

Element	Description
FTP server*	Fill in with the address of the FTP server to which the system has to send the file.
FTP port	Usually, the FTP service uses port 21. However, the port that the server listens to for FTP connections can be any port (if it is not already reserved for another service). The server administrator also configures it.
Timeout	Specify the period, expressed in seconds, within which the FTP account has to try to connect to the FTP server before timing out.
FTP user and password	Fill in with valid credentials to access the remote FTP directory.
FTP remote directory	Fill in with the directory of the FTP server where the reports have to be stored.
User / Password	Data pull information

Note: The field marked with (*) is mandatory.

5. Click **Save**.

Create an SMTP account

1. Access the **Reports** page (> **Reports**).
2. From the **Accounts** tab, click .
3. From the **Account type** list, select the **SMTP account**.
4. Fill in the fields described below:

Element	Description
SMTP server*	Fill in this field with the address of the server used for sending the email.
SMTP port	Usually the mail service uses port 25. However, some providers have changed it to another one in order to limit SPAM (e.g., the GMAIL account uses port 587). *Note: check the provider requirements to configure an SMTP account.*
Timeout (s)	Specify the period, expressed in seconds, within which the SMTP account has to try to connect to the SMTP server before timing out.
SMTP user	Fill in with the email address used for sending the email.
SMTP password	Fill in with the password for the email account.
Recipients*	Fill in with the email address of the receiver(s).
Sender name	Fill in by typing the name used for the sender (e.g., web app).
Sender email	Fill in with the address the email is sent to.
Email subject	Fill in with the name used as the subject for outgoing emails.
Email text	Type a text that informs the receiver about the content of the Report file(s).
User / Password	Data pull information

Note: The field marked with (*) is mandatory.

5. Click **Save**.

Create an SFTP account

1. Access the **Reports** page (> **Reports**).
2. From the **Accounts** tab, click .
3. From the **Account type** list, select the SFTP account.
4. From the **Authentication Method** list, select an option:

If you select...	Then...
User/Password	Go to step 5.
User/Public key	Click to send the **authentication key** request and to download an encrypted file.

5. Fill in the fields described below:

Element	Description
FTP server*	Fill in with the address of the FTP server to which the system has to send the file.
FTP port	Usually, the FTP service uses port 22. However, the port that the server listens to for FTP connections can be any port (if it is not already reserved for another service). The server administrator also configures it.
Timeout	Specify the period, expressed in seconds, within which the FTP account has to try to connect to the FTP server before timing out.
FTP user and password*	Fill in with valid credentials to access the remote FTP directory.
FTP remote directory	Fill in with the directory of the FTP server where the reports have to be stored.
User / Password	Data pull information

Notes:

- *This option is not available if you choose the **User/Public key** option;*
- *The field marked with (*) is mandatory.*

6. Click **Save**.

Schedule a report

1. Access the **Reports** page (> **Reports**).
2. From the **Schedules** tab, click to enter the editing mode.
3. Fill in the fields described below:

Element	Description
Name	Report name
Model	• Test Module Events • Test Fx Event • Test History
Recipient	Report recipient
Data interval	• Punctual • Daily • Weekly • Monthly • Yearly
Aggregation Type	• None • Daily
Start date	Start date

4. Click **Save**.

Create a template

1. Access the **Reports** page (> **Reports**).
2. Access the **Templates** tab from the multifunction bar
3. Click to open the configuration report part and fill the following fields:

<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Name</td><td>Enter the name of the report that is going to be generated.</td></tr>
<tr><td>Report type</td><td>Select the type of logged file to send. According to your selection, the available parameters change.
<table>
<tr><th>Report type
Parameters</th><th>History</th><th>Events</th><th>Legacy FTP push</th><th>ISO8601</th><th>Batch</th><th>Alarms</th><th>Alarms log</th></tr>
<tr><td>Layout style: Record / Table</td><td>All</td><td>Record</td><td colspan="5">None</td></tr>
<tr><td>File format to generate and receive: xlsx / csv / xml / Zipped.</td><td>All</td><td>All except for Zipped</td><td colspan="3">csv</td><td colspan="2">xlsx / csv</td></tr>
<tr><td>Layout name: structure of file name</td><td colspan="2">Yes</td><td colspan="3">No</td><td colspan="2">Yes</td></tr>
<tr><td>Saving Mode: Single / Archive</td><td>All</td><td colspan="3">None</td><td>All</td><td colspan="2">None</td></tr>
<tr><td>Decimal separator: Dot / Comma</td><td colspan="2">All</td><td colspan="3">None</td><td>All</td><td colspan="2">None</td></tr>
<tr><td>Null value: Null / Customised</td><td colspan="2">All</td><td colspan="3">None</td><td colspan="2">All</td></tr>
<tr><td>Midnight format: 23:59 / 24:00 / 00:00</td><td colspan="2">All</td><td colspan="3">None</td><td>All</td><td colspan="2">None</td></tr>
<tr><td>Select variables to be included in the report. If you select All variables, you can select the Measure type.</td><td colspan="2">Yes</td><td colspan="3">Select devices</td><td colspan="2">Yes</td></tr>
<tr><td>Measure type: AVG, MIN, MAX, SAMPLES, DELTA, Include meters notes</td><td colspan="2">If you select All variables</td><td>All except for SAMPLES and DELTA</td><td>None</td><td colspan="3">If you select All variables</td></tr>
</table></td></tr>
<tr><td>Export</td><td>The report will be generated without saving the changes.</td></tr>
</table>

Element	Description
Save and export	The report will be generated and saved.
Save	The report will be only saved.
Cancel	The changes will be discarded.

Re-generate a report

1. Access the **Reports** page (> **Reports**).
2. Access the **History** tab, click to restore the report.
3. Click to download the re-generated report.

Search function

Content

This chapter includes the following sections:

How to access the search menu 194
Search benefits 195
How to search a function 196

How to access the search menu

1. From the **Navigation bar**, click  to open the **Main menu**.
2. Select **Search>**

Search benefits

You can choose a function by clicking  and by selecting a function from the drop-down list.

Notice: if you leave this page, the changes will be lost.

How to search a function

1. Access the **Search** page (**> Search**).
2. Click  to open the available signals.
3. From the list box, select the function.
4. Click **Apply** to save the selection.
5. Verify the presence of the selected functions.