



TECHNICAL DOCUMENTATION

I4GEN



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INTRODUCTION

USER'S NOTICE

Copyright of this manual belongs to the manufacturer. No part of this manual, including the products and software described in it may be reproduced, transmitted or translated into any language in any form or by any means without written permission of the manufacturer.

This manual contains all the information required for the use of this product to meet the user's requirements. It may change or be corrected at any time without notice.

The manufacturer provides this manual "as is" without warranty of any kind, and will not be liable for any indirect, special, incidental or consequential damages (including damages for loss of profit, loss of business, loss of use of data, interruption of business and the like).







Products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies. They are used only for identification or explanation and to the owner's benefit, without intent to infringe.

CAUTION SAFETY PROTECTIONS

Operate the device according to the correct installation steps and with great care to guarantee safety and comfort using experience. Please refer to the following safety instruction guide to avoid the danger of electric shock or fire. Please observe the previous safety instruction guide to use and maintain the product and the hard disk to make sure of a safe operating environment.

- Please follow the instruction manual for the operation guide.
- The appropriate operating temperature range is -10°C...+60°C.
- The operation humidity for this product is 5%...80%RH.
- To avoid high temperature, please DO NOT overload the maximum power of the external power supply while the system is consuming high voltage. Be aware of the maximum temperature allowance of the power supply.
- Always unplug the power cable and other hardware cables from the system before cleaning.
- Use only a dry cloth to clean the product.
- Make sure that there is no heat source nearby when the product is working.
- Make sure that the thermal louver of the product is not blocked.
- Make sure to set up or use the product on a stable surface.
- Make sure not to drop the product or strike it in any way.
- Make sure not to move the product when the power is on.
- Disconnect the power cord from the **i4Gen** unit prior to any installation. Be sure both the system and all external devices are turned off. A sudden surge of power could ruin sensitive components. Make sure **i4Gen** is properly grounded.
- Do not open the system's back cover.

PACKAGE CONTENTS

i4Gen 	QUICKSTART 	DC-DC Adapter 	Power Cord 
X1	X1	X1	X1
WI-FI Antenna 	Fixed Parts 		
X2	X1		

- 1x **i4Gen**
- 1x DC-DC Adapter 9 to 36VDC input for 12VDC output
- 1x Power cord
- 2x WIFI antenna
- 1x Cabinet fixed parts
- 1x Quick-start

Environmental Protection Announcement

Do not dispose of this electronic device into the trash while discarding. To minimize pollution and ensure utmost protection for the global environment, please recycle.



GENERAL DESCRIPTION

- 10-point capacitive multi-touch
- Edge-to-edge narrow bezel design and fan-less cooling system
- Designed for easy wall mount, panel mount, and VESA mount installation
- A truly flat, easy-to-clean front surface with an edge-to-edge design
- USB 3.0 ports support lock device
- IO ports designed for easy connection
- 9 to 36VDC support using the DC-DC converter provided with the unit (i4Gen touchscreen DC voltage input only accepts 12VDC)
- On-board Intel® Braswell series SoC processor, with low power consumption never denies the high performance
- On-board 4GB DDR3L 1333Mhz SO-DIMM
- On-board 1 x full-size Mini-PCIE slot
- On-board 1 x M.2 slot (M-key), type-2242 SATA interface for SSD device
- Support 2 x RJ-45 Gigabit LAN port and 1*external RJ-45 COM port
- 1x2.4G WIFI module with support for 802.11 b/g/n WIFI communication

Additional Functions

- **WiFi:** The Mini PCI-E on-board socket in the board is integrated with a WIFI card (802.11 b/g/n) that can act as a mini wireless modem when external antennas are connected.
- **Giga LAN:** The system is integrated with Gigabit LAN network controller with ACPI (Advanced Configuration and Power Interface) management realizing efficient power management for the operating system.
- **USB 3.0:** Experience fastest data transfers at 5Gb/s with USB 3.0 the new latest connectivity standard. Built connect easily with next-generation components and peripherals, USB 3.0 transfers data 10 times faster and backward compatible with previous USB2.0 components.
- **dB value:** The system design features the low noise operation normally required in a living-room. The average is below 26 dB under normal operation.

SPECIFICATIONS

Display

Front bezel	IP65, NEMA 4 rugged protection, Full planar metal border
Display type	10.1" with LED back-light
Brightness (cd/m ²)	400 nits
Display color	16.2M
Resolution	1280x800 at 60Hz
Viewing angle (H/V)	170°/170°
Pixel pitch	0,1695x0,1695mm
Aspect ratio	16:10
Contrast ratio	800:1
Response time	30ms

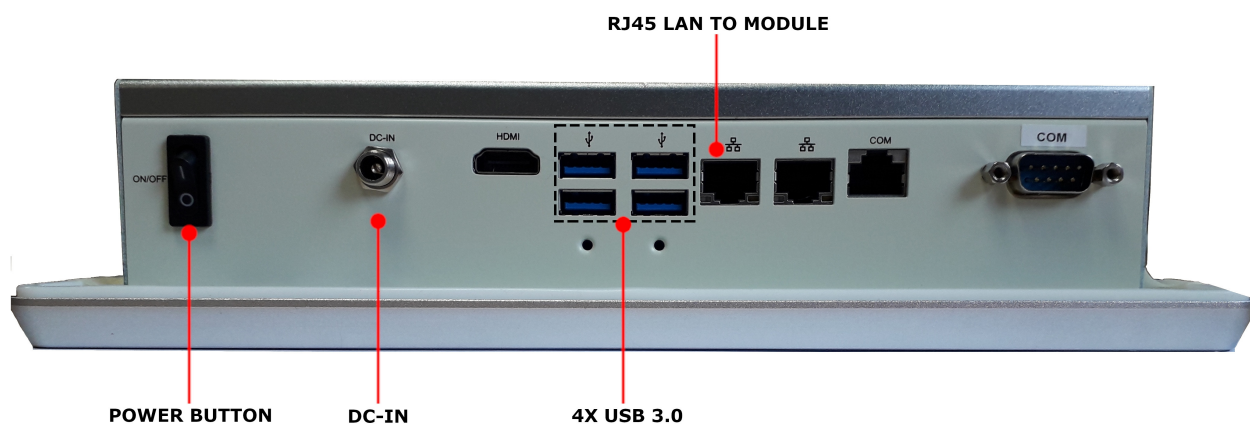
Touch Screen




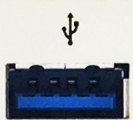

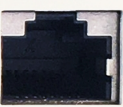

Type	Projected capacitive type
Active range	257,1x159,66mm ±0,2mm (10,1x6,29in)
Transparency	≥ 87%
Surface hardness	≥ 6H (JIS-5400)
Glass haze value	≥ 3%

Main CPU Board

CPU	Intel® Braswell series SoC CPU
System memory	On-board 4GB DDR3L 1333MHz SO-DIMM
BIOS	AMI 64Mb Flash ROM

I/O System



Icon	Name	Quantity	Description
	Power button	1	Press to turn On/Off the system.
	DC-in power connector	1	12VDC power supply input (9 to 36VDC support using the DC-DC converter provided with the unit) .
	HDMI port	1	To connect a display device that supports HDMI specification (not used).
	USB 3.0 port	4	To connect devices compatible with the USB specification. USB 3.0 port supports up to 5Gbps data transfer rate.
	RJ-45 LAN port	2	This connector is standard RJ-45 LAN jack for network connection. Only the port labelled as "Module" is effective. The other port is currently not used.
	RJ-45 COM port	1	This connector is standard RJ-45 COM jack for serial console port connection (not used).
	GPIO connector-male	1	This connector is an RJ-45 COM port for console function (not used).

Environment

Operating temperature range	-10°C...+60°C
Humidity	5%...80% RH (relative humidity)

PRESENTATION

i4Gen is a user interface made by **CRE TECHNOLOGY** to offer users complete management of new **CRE TECHNOLOGY** controllers.

The unit hardware is a multi-touch screen color display developed for harsh environment and industrial areas, providing access to all data of the controllers for control, measurement, and configuration.

Thanks to an embedded TeamViewer© License, it will be possible to access remotely to **i4Gen** for support, remote control or fleet management.

Control and Management

Direct display

i4Gen is able to display information from one controller in direct Ethernet connection and shows a basic overview of the power plant by using controller CAN bus data when applicable.

Multi-user display

Several **i4Gen** can also be securely connected by Ethernet hub to a single controller (or a group of controllers), for redundancy application, multi-level access or long-distance monitoring panels.

Events displayed/recorded

An innovative feature turns major alarms and faults into 3D graphical object display, to warn the operator about an important event and facilitate immediate diagnosis (ex: coolant tank lights up in red in case of coolant temp fault or in orange in case of coolant temp alarm).

An event alarm/fault recorder is also available on a dedicated display page, indicating timestamps, status, acknowledgment, and corresponding variable; the event page can be filtered for diagnosis and investigation of selected variables.

Compatibility

i4Gen is compatible with these controller versions:

- **GENSYS COMPACT PRIME**: v2.10 or later
- **GENSYS COMPACT MAINS**: v2.10 or later
- **AMF COMPACT**: v2.10 or later
- **SYNCHRO COMPACT**: v2.10 or later
- **MASTER COMPACT**: v2.10 or later
- **MASTER COMPACT 1B**: v2.10 or later
- **BTB COMPACT**: v2.10 or later

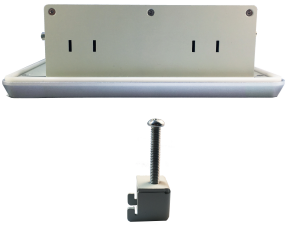
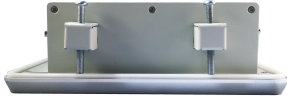
INSTALLATION

MECHANICAL MOUNTING

Install **i4Gen** position at eye level and at a brightness-less location.

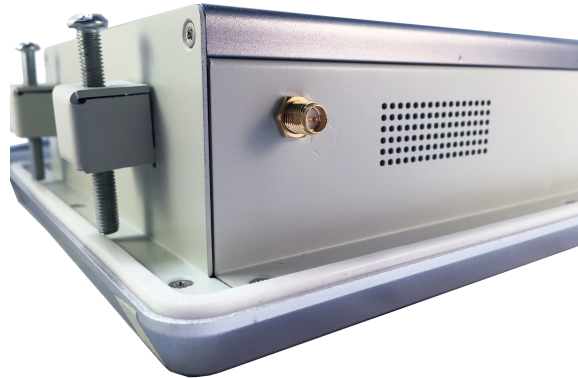
Frame cut-out (hxl): 160x242mm (6.3x9.5in).

Chassis Fixed Parts

	<ol style="list-style-type: none"> 1. Insert the corresponding edges of the fixed part into the slots until they match. Make sure that the fixed part is installed as shown in the picture, with protruding tips upwards. 2. The models that support this fixing mode have pairs of slots reserved on both sides of the module. The user can choose the height or position of the installation spot.
	<ol style="list-style-type: none"> 3. Tighten the screw so that the fixed part can be fitted into the slots tightly. Install other fixed parts to the system in the same way.

WIFI ANTENNA INSTALLATION (OPTIONAL)

Screw the two antennas on the antenna heads connectors:



POWER SUPPLY

First make sur to turn off the power before assembling everything together.

Connect the battery to the DC-DC converter:



Note that The DC-DC converter input voltage range is 9 to 36VDC for 12VDC output. It also includes a couple of protections:

- **Short circuit**
- **Overload**
- **Over/Under voltage**
- **Input reverse polarity**

This module is not optionnal and should be used. Do not connect any DC supply directly to the touchscreen.

You can now plug the power jack in it's connector on the **i4Gen**. Make sure that you tighten it:



i4Gen is now ready to use. You can switch on the power and **i4Gen** will start automatically.

NETWORK CONNECTION

There are several possible connection types between **i4Gen** and the controller.

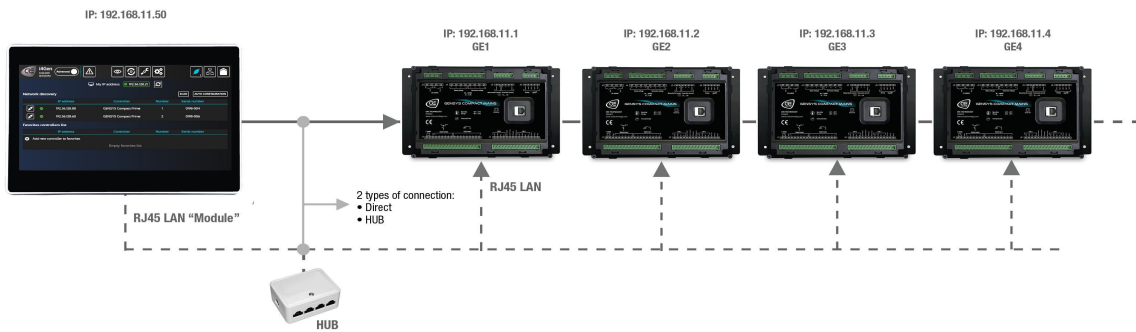
Direct Connection

- Connect the Ethernet port (RJ45-LAN) labeled "**Module**" of **i4Gen** to the Ethernet port of the controller.

Connection Via a Switch

- Connect the Ethernet port (RJ45-LAN) labeled "**Module**" of **i4Gen** on one of the switch's Ethernet ports.
- Connect the Ethernet port of the controller on one of the switch's Ethernet ports.

You will then be able to supervise each controller, one by one, using **i4Gen**:



COMMUNICATION

PRE-REQUISITE

To be able to establish communication between **i4Gen** and the controller, the network addresses of both devices must be configured:

- **i4Gen** network configuration can be done from **i4Gen "Network"** settings page (see [Network](#) chapter).
- The controller network configuration can be done from the controller front panel or via **i4Gen** software.

If **i4Gen** and the controller are connected directly, the network configuration of both devices has to be compatible:

- The default IP address of **i4Gen** is: 192.168.11.50
- The default IP address of **CRE TECHNOLOGY** controllers is: 192.168.11.1

By default **i4Gen** and controllers can communicate together. Please make sure that if you change the IP addresses, the subnet mask is set accordingly.

OFFLINE/ONLINE MODE

i4Gen can be used in offline/online mode.

Offline Mode

The controller supervision part doesn't display any values.

The static configuration part allows you to:

- Make a configuration for a controller and save it on a configuration file.
- Import a configuration file and modify an existing controller configuration.


Online Mode (connected to a controller)

i4Gen is synchronized with the controller:

- The pages reflect the controller's measures, configuration, alarms/faults...

The controller's parameters configuration is done in real time and they are sent one by one in most cases.

LOGIN/CONNECTION



Press "**Login/connection**" icon to open login/connection window.
i4Gen uses the classic password system of the **CRE TECHNOLOGY** modules for access rights and parameter modification of the connected module.

Level	Default password	Rights	Menu
0	None	None	Display and manual button
1	1	User settings	All menus
2	CRE Technology reserved distributor	Advanced settings	All menus

Connection window in offline mode:

CONNECTION

✕

IP address

192.168.11.1

CONNECT

Modbus/TCP port

502

Not connected

HTTP port

80

Not logged in

Password

LOGIN

To connect to a module, you have to fill the following information:

- The IP address of the controller.
- The Modbus/TCP port of the controller.
- The HTTP port of the controller.
- A password according to your needs.

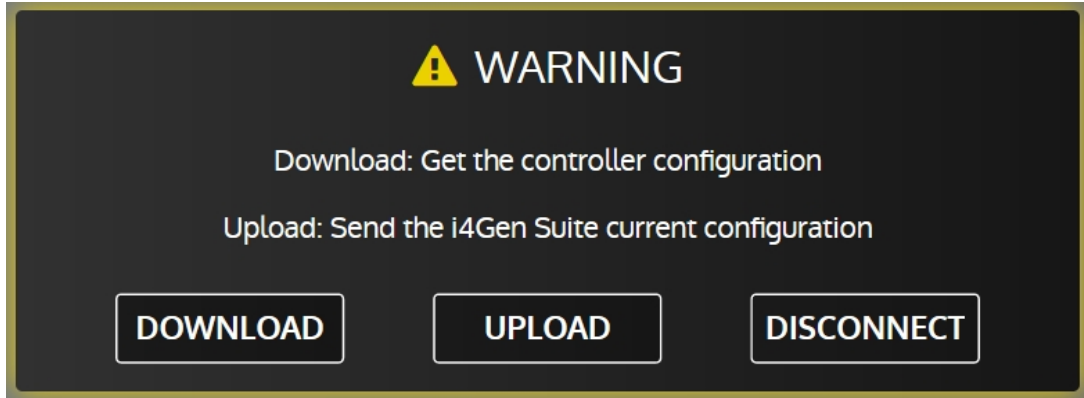
CONNECT

Once you have filled this information, push the button

to connect and log in with the entered password.

Once you are connected, you will always be synchronized with the controller.

In level 1 or above, a pop-up message (see below) will ask you to choose between 3 actions:




- Download: **i4Gen** configuration is overwritten by the current configuration of your controller.
- Upload: Upload **i4Gen** configuration to your controller.
- Disconnect: Go back in offline mode.


Once logged in, you can change the login password level by changing the "**Password**" field and pressing

the button: 

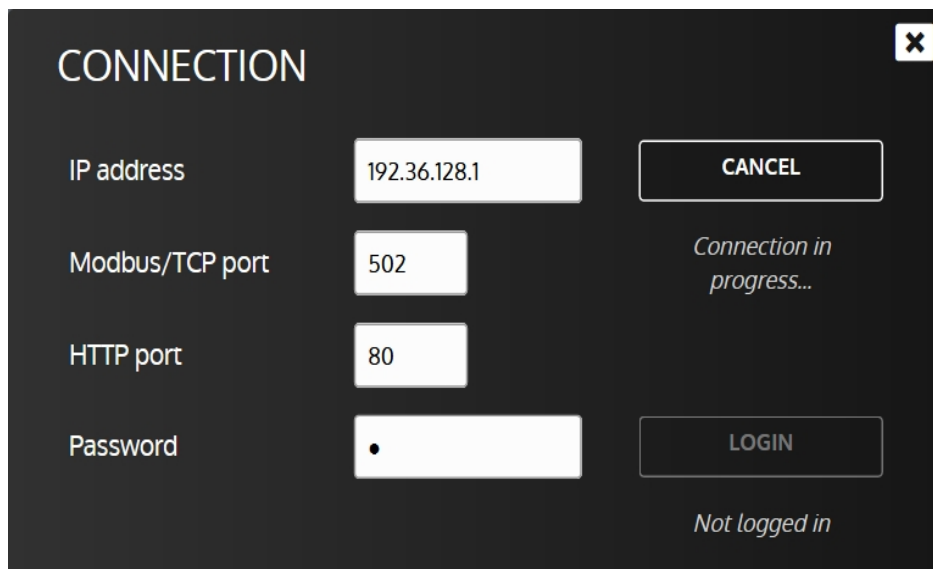
Passwords are the same as those used to connect directly to the module via its front panel or embedded website.

It is possible to disconnect by pressing the button: 

When the connection to the controller is lost, **i4Gen** attempts to reconnect to the remote controller for several seconds and then stops after a while.

During reconnection attempts, the  button is replaced by a  button to manually cancel the attempts.

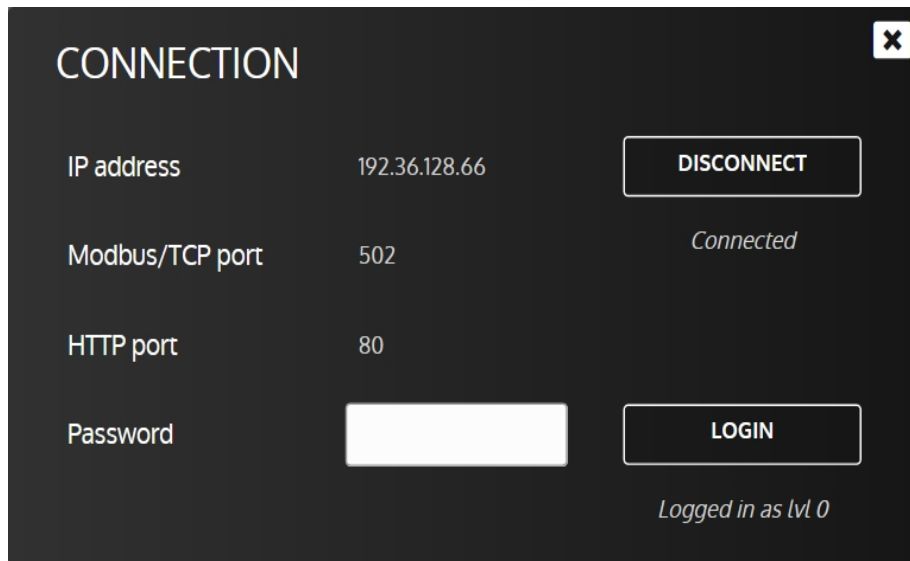
Connection window in "**Connection in progress...**" mode:



To disconnect a module from **i4Gen**, open the connection window then press the button:

DISCONNECT

Connection window in "**Connected**" mode:



The screenshot shows a dark-themed window titled "CONNECTION" with a close button (X) in the top right corner. The window displays connection parameters and status:

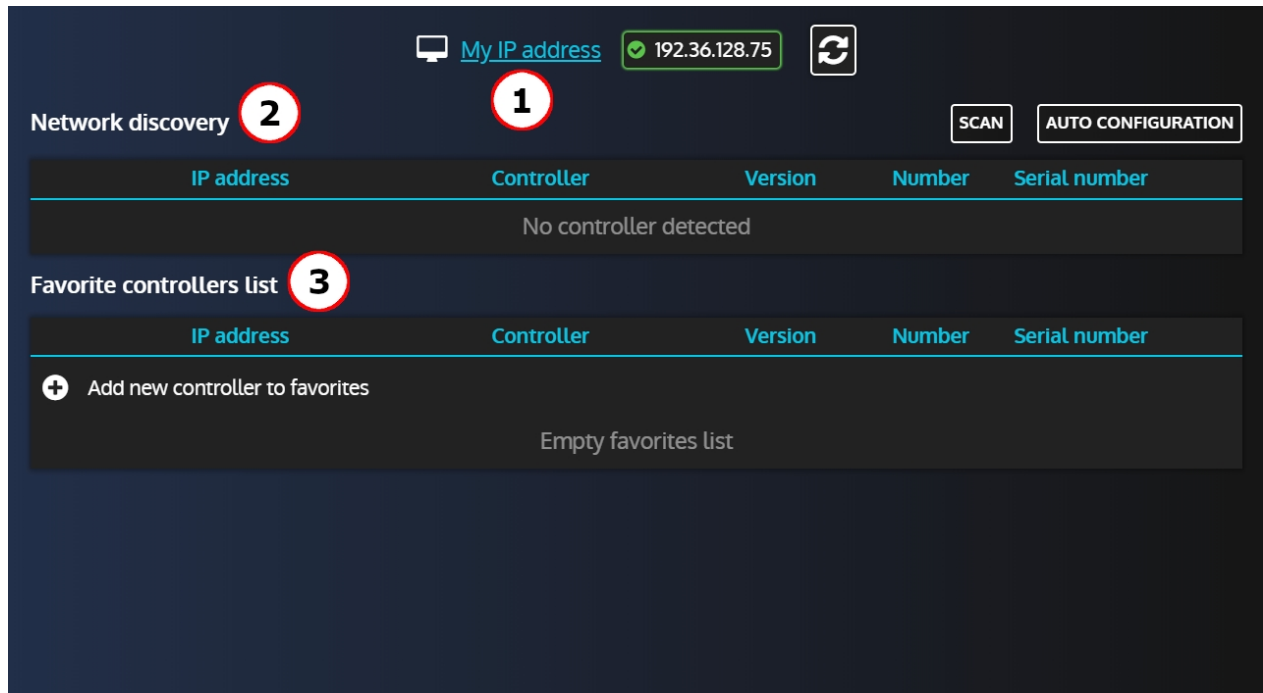
IP address	192.36.128.66	DISCONNECT
Modbus/TCP port	502	Connected
HTTP port	80	
Password	<input type="password"/>	LOGIN
		Logged in as lvl 0

EASY CONNECT

Easy connect function has three main purposes:

- Automatically detects **CRE TECHNOLOGY** controllers on an Ethernet network
- Allow to quickly switch the connection between controllers
- Auto configure **CRE TECHNOLOGY** controllers IP address to be able to access them with the current network configuration.

Interface



1. Display current **i4Gen** IP address. Pressing  will refresh the list of available IP addresses.

2. The "**Network discovery**" section will display all **CRE TECHNOLOGY** controllers automatically found on the network and allow to connect to them. The "**Scan**" button allows to refresh the list of controllers and the "**Auto configuration**" button will automatically configure detected controllers according to the **i4Gen** IP settings to ensure that it can connect to them.

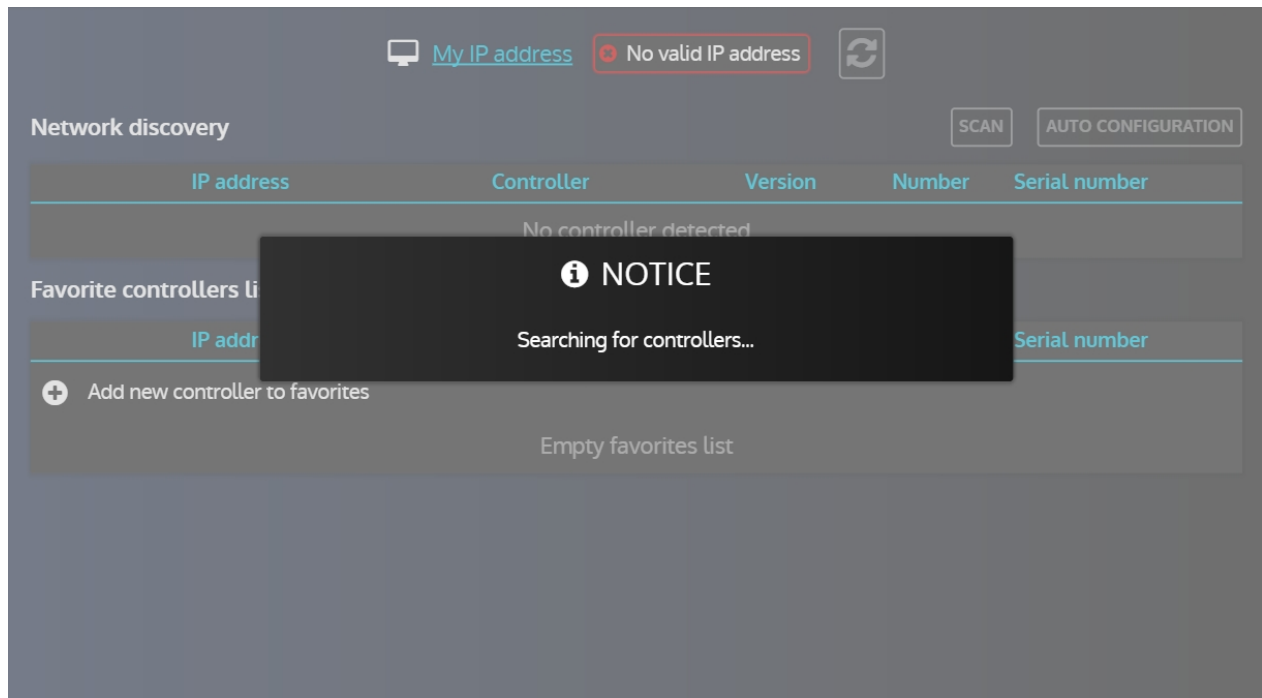
Note that if a controller's IP settings already allow a connection in their current state, **i4Gen** will not change them.

3. The "**Favorite controllers list**" allows to manually add a controller. Both "**Scan**" and "**Auto configuration**" buttons have no impact on the controllers in this list.

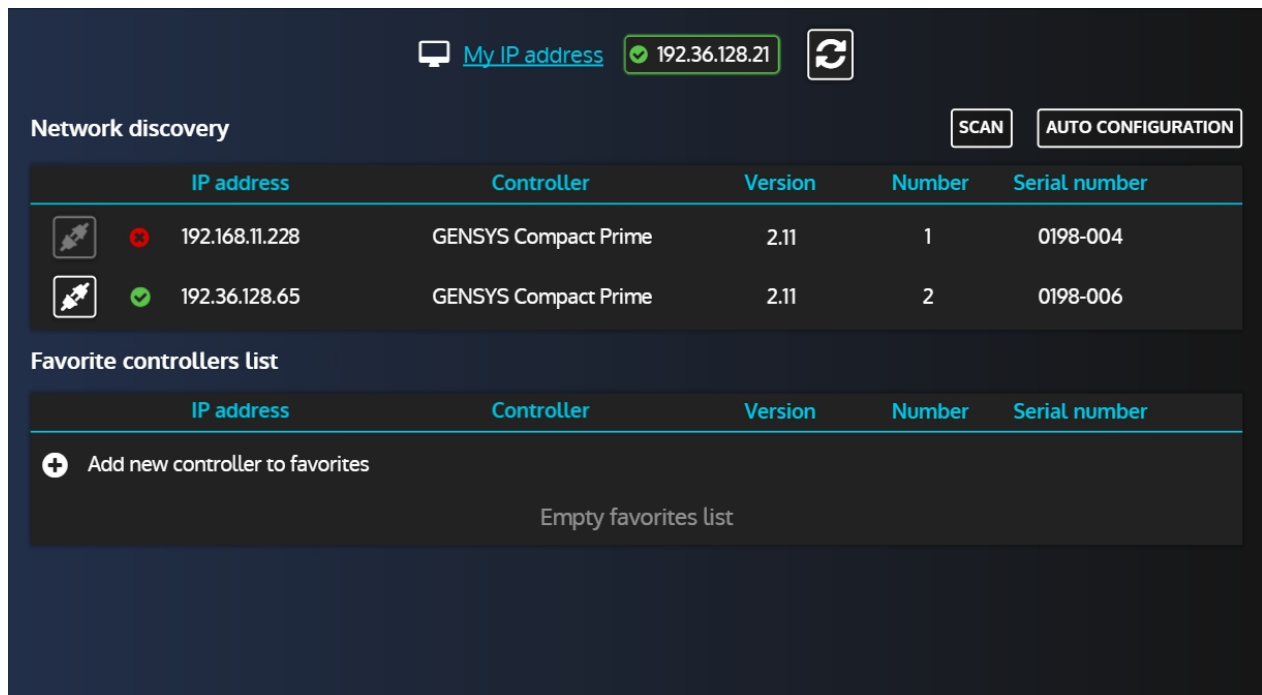
You will also be able to connect to the controllers in this list (only if the **i4Gen** IP settings matches).


Network discovery

When entering the page, **i4Gen** will automatically scan the network to find controllers:

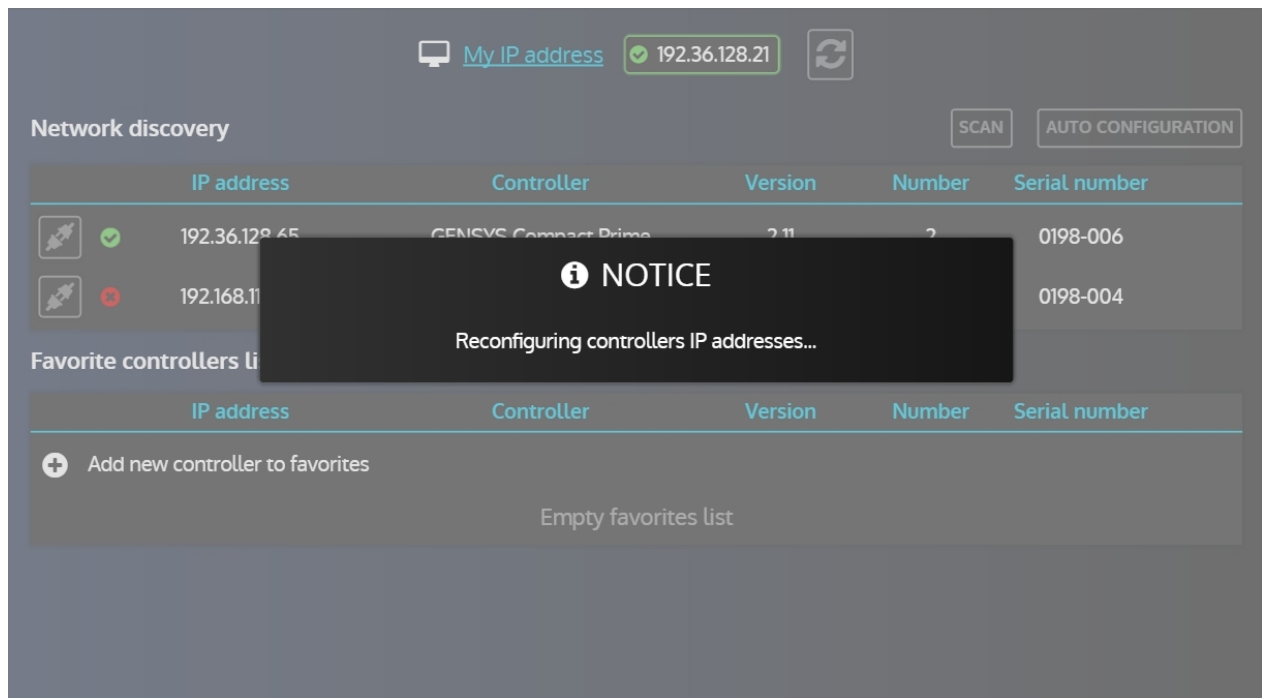


And display the controllers found:



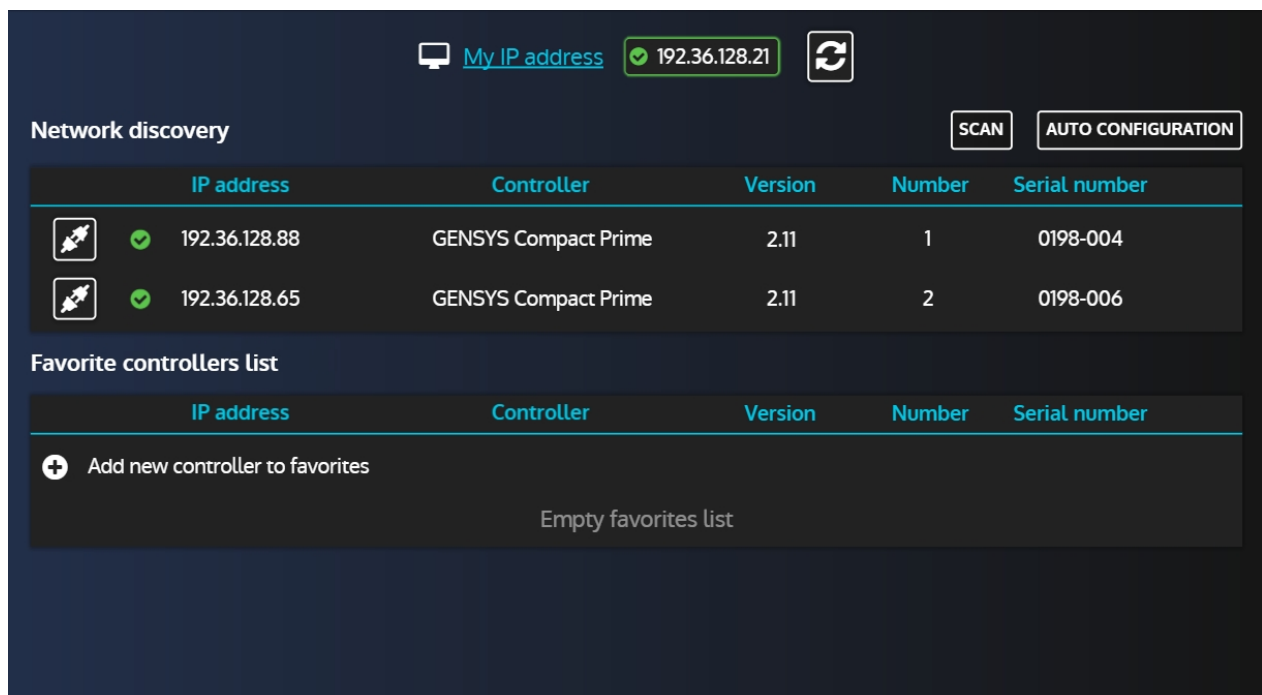
In the list, we can see that one controller has a red cross next to it and the  is disabled. This is because its current IP settings doesn't match ours thus it is not possible to connect to it.


Pressing the **"Auto configuration"** button will resolve this situation for us:





Note that you'll be prompted to validate the auto configuration before it starts.

After a few seconds, the auto configuration is done and both controllers are now green:





Using the  button, we can now connect to one of the controllers:


 [My IP address](#) ✓ 192.36.128.21 

Network discovery

SCAN AUTO CONFIGURATION


		IP address	Controller	Version	Number	Serial number
	✓	192.36.128.88	GENSYS Compact Prime	2.11	1	0198-004
	✓	192.36.128.65	GENSYS Compact Prime	2.11	2	0198-006

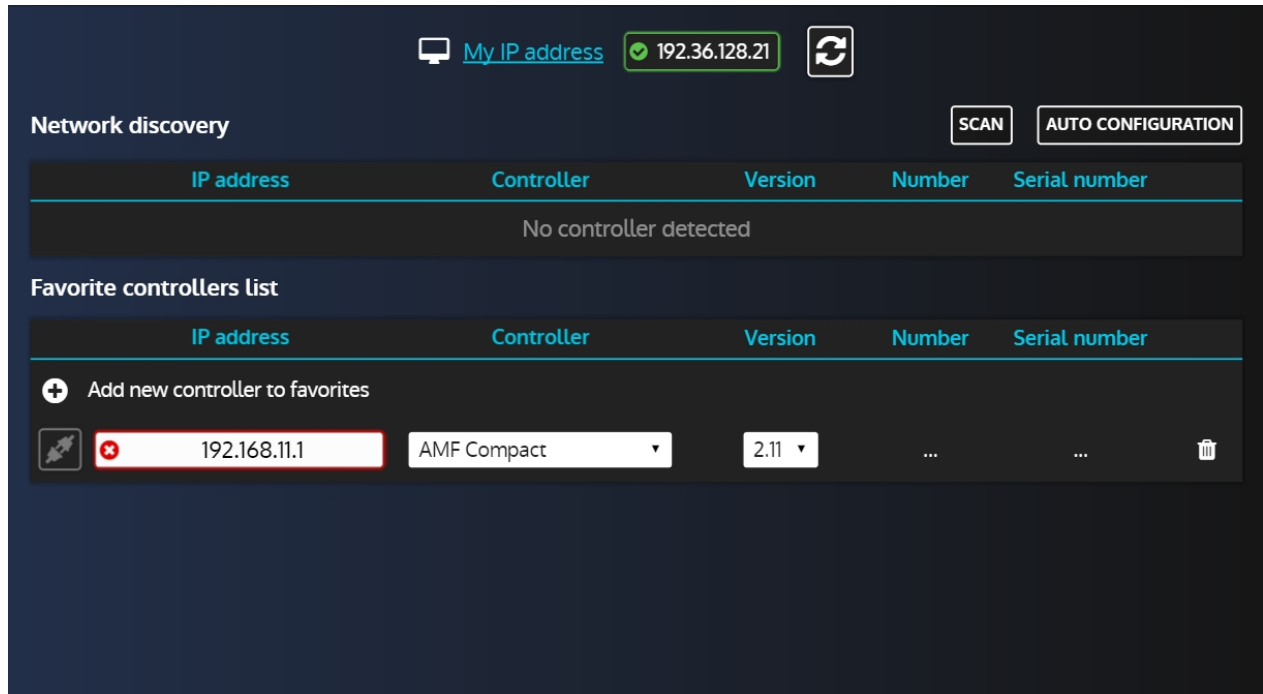
Favorite controllers list

	IP address	Controller	Version	Number	Serial number
	Add new controller to favorites				
Empty favorites list					

Note that you'll be prompted a password. Beware, if you used a password level 1 or above, the controller's configuration will automatically be downloaded.

Favorite controllers list

You can add a controller by pressing the  button:



Note that, as stated previously, there will be no automatic actions for the elements in this list. If there is a red cross next to the controller's IP address, you'll have to either adjust the **i4Gen** IP settings or the controller's IP setting to be able to connect to it.

The Favorite controllers list is part of the user configuration thus it is saved and you'll keep the list after restarting **i4Gen**.

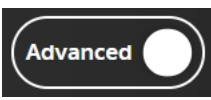


INTERFACE






The **i4Gen** interface replaces the front panel of the **CRE TECHNOLOGY** controllers and offers a better ergonomomy to facilitate the supervision of our products.

Header








Note that the date/time isn't displayed until connected to a controller. Once connected, it will show the date/time of the controller.

BUTTONS	
	About page
	Configuration mode: <ul style="list-style-type: none"> • Standard: Only the most important parameters of the controller are displayed. • Advanced: All the parameters of the controller are displayed.
	Fault & Alarm menu (Note that the icon displayed is when there are no faults or alarms).
	Controller supervision menu
	Controller dynamic settings
	Controller settings menu
	Settings menu
	Login/connection menu
	Easy Connect page
	Home page

INDICATORS	
	Alarm: <ul style="list-style-type: none"> Blinking means there is atleast one unacknowledged alarm. Static means there is atleast one alarm acknowledged and in progress.
	Fault: <ul style="list-style-type: none"> Blinking means there is atleast one unacknowledged fault. Static means there is atleast one fault acknowledged and in progress.
	Connection state with the controller (currently disconnected).
	Connection state with the controller (currently connected, the "1" indicate the password level used to log in).
	Connection in progress or reconnection attempts after connection loss.

Sub-header

	GENERATOR PROTECTIONS	←	OVER/UNDER FREQUENCY	OVER/UNDER VOLTAGE	OVER CURRENT/NEUTRAL	REVERSE KW/H	→
---	-----------------------	---	----------------------	--------------------	----------------------	--------------	---

BUTTONS	
	Left scrolling.
	Right scrolling.
	Access to a specific page. <i>Note: A link can be grayed out depending on the current controller settings and the offline/online mode.</i>
INDICATORS	
	Title of the current menu.
	Title of the current page.

Footer













the footer of the interface gives access to:



- Control buttons of the controller.
- Specific information on the generator (number, engine status, power status).
- Synoptic of the installation.

Notes:

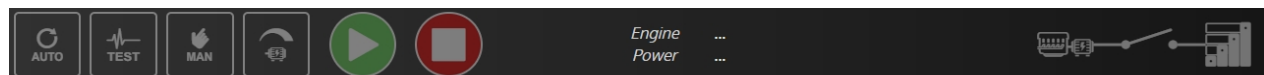
- When the i4Gen is offline, the control buttons from the footer cannot be used.
- In controller static configuration pages, the footer is not accessible.

TOUCH ICONS	
	AUTO mode, colored in theme color when active.

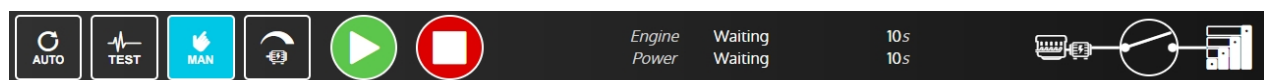
		TEST mode, colored in theme color when active.
		MANUAL mode, colored in theme color when active.
		Give access to additional buttons for manual frequency/voltage control. Colored in theme color when active.
		Increase frequency.
		Decrease frequency.
		Increase voltage.
		Decrease voltage.
		Start the generator.
		Stop the generator.

INDICATORS			
<i>Engine</i>	Waiting	10s	Engine state, power state and states timers.
<i>Power</i>	Waiting	10s	
			Synoptic for configurations without mains. Breaker icon becomes a button only in MANUAL mode. Supplied elements are colored in green.
			Synoptic for configurations with mains. Breaker icon becomes a button only in MANUAL mode. Supplied elements are colored in green.

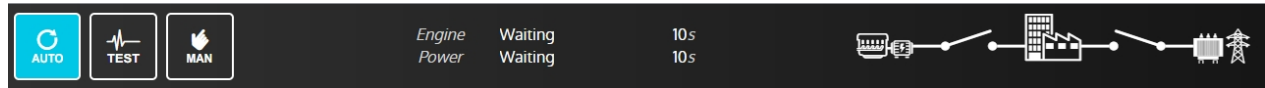
Footer in offline mode:



The **i4Gen** footer is dynamic and adapts to the controller configuration:




GENSYS COMPACT PRIME in **MANUAL** mode: control buttons are available.



GENSYS COMPACT MAINS in **AUTO** mode: control buttons are hidden

CONTROLLER SUPERVISION

	<p>"Controller supervision" part displays controller measures in real time. Select the supervision icon to open the menu that gives access to all controller supervision pages.</p>
---	--

GRAPHIC OBJECTS

i4Gen offers several graphical objects to display the different measures of the connected controller in order to offer an ergonomic, dynamic and aesthetic display.

NUMERICAL DISPLAY

Composition: label + value + unit (not that in this case, there is no unit for this parameter):



This is the simplest graphical object of the application, but also the most effective for displaying a large number of measures on the screen.

NUMERICAL DISPLAY BY VARIABLE NUMBER

Composition: label + editable address field + value + unit:



This is the graphic object used in the **"Info"** page of **i4Gen**. It allows you to search for a controller's variable through a search engine to display its label, value and unit.

The variables of the **"Info"** page are automatically saved when a variable of the page is changed. Each controller type has its own custom **"Info"** page.

Note that this page is local to **i4Gen** and doesn't reflect the controller's Info page.

BOOLEAN DISPLAY (LED)

Composition: label + LED:



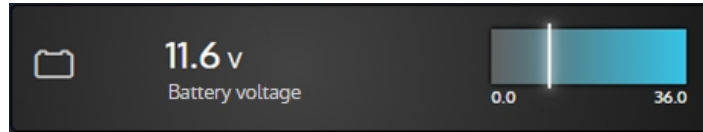
This is the graphic object used for most boolean (binary) variables.

LED color codes:

- Green: Active
- Grey: Inactive

BAR-GRAPH

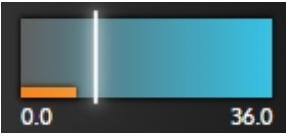



The bar-graph displays graphical information on generator mechanical measures (from a minimum to a maximum):






Note: The slider is the value of the measurement relative to the min and max shown below the bar-graph.

User Configuration Reminder

The protection levels configured for the measurement associated with the bar graph are directly represented on the bar graph:

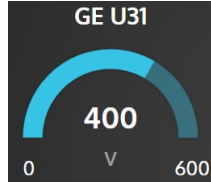
	Representation of a minimum protection threshold configured as an alarm.
	Representation of a maximum protection threshold configured as a fault.
	It is possible to display up to two maximum and two minimum protection thresholds per bar-graph.
	If no protection is configured, no threshold will be displayed on the bar-graph.

Bar-graph States

	Nothing to report: When the cursor remains outside of the alarm/fault ranges or no protection threshold has been configured, the background of the bar-graph is colored with the selected theme and the numeric value on the left side of the bar-graph is white colored.
	Alarm active: When the cursor overlaps an alarm range and the associated protection has been triggered on the controller, the bar-graph and its numeric value turn into orange color.
	Active fault: When the cursor overlaps a fault range and the associated protection has been triggered on the controller, the bar-graph and its numerical value turn into red color.

GAUGE

This is the graphic object used for electrical measures and whose representation of the measure with respect to a minimum and a maximum is important:



Note: The gauge fill part corresponds to the value of the measurement with respect to the minimum and maximum indicated below the gauge.

User Configuration Reminder

The protection levels configured for the gauge associated measure are directly represented on the gauge:

	Representation of a minimum protection threshold configured as an alarm.
	Representation of a maximum protection threshold configured as a fault.
	It is possible to display up to two maximum and two minimum protection thresholds per gauge. If no protection is configured, no threshold is displayed on the gauge.

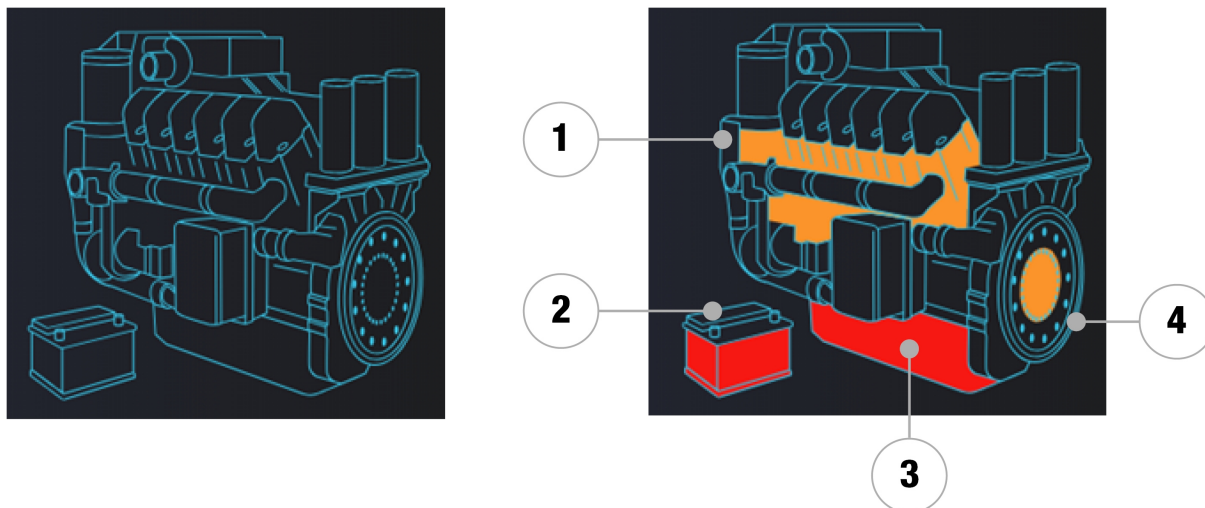
States of the Gauge

	Nothing to report: When the gauge fill part remains out of the alarm/fault ranges or no protection threshold has been configured, the gauge background is colored with the selected theme and the gauge numerical value is white colored.
	Alarm active: When the gauge fill overlaps an alarm range and the associated protection has been triggered on the controller, the gauge fill part and its digital value turn into orange color.
	Active fault: When the gauge fill overlaps a fault range and the associated protection has been triggered on the controller, the gauge fill part and its numerical value turn into red color.

3D PICTURES

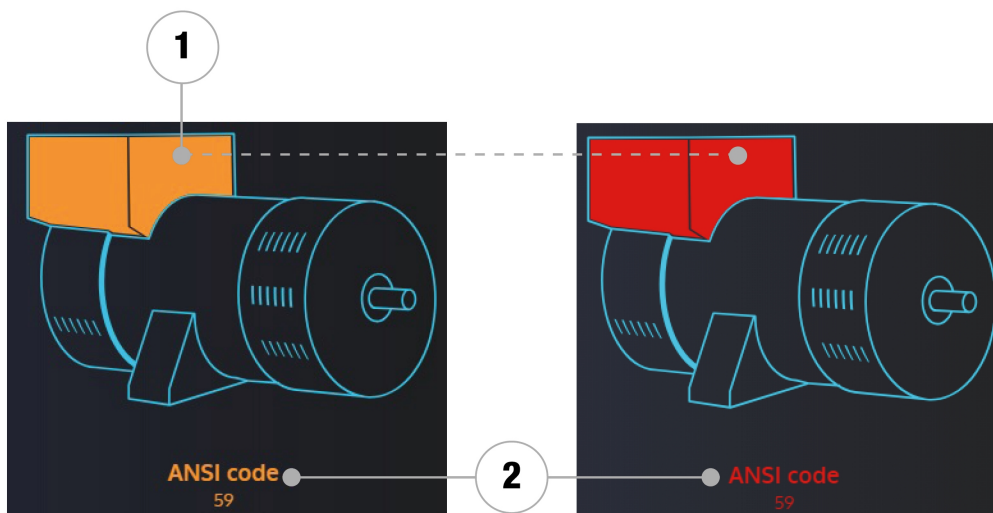
Some pages of supervisions display 3D pictures that change according to the state of the associated protections in each of these pages.

Engine/Battery



1. Indicates the presence of a water temperature alarm/fault.
2. Indicates the presence of a battery voltage alarm/fault.
3. Indicates the presence of an oil pressure alarm/fault.
4. Indicates the presence of an engine speed alarm/fault.

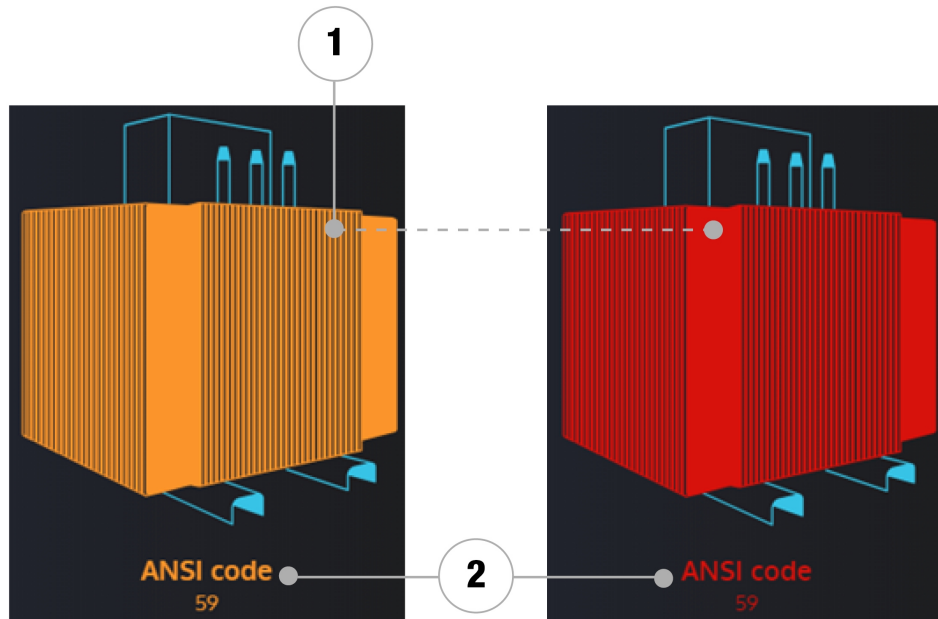
Alternator



1. Indicates the presence of a generator electrical alarms/faults.
2. Indicates the ANSI code(s) of the alarms/faults present on the generator.

Note: The color of the fault has priority over the color of the alarm.

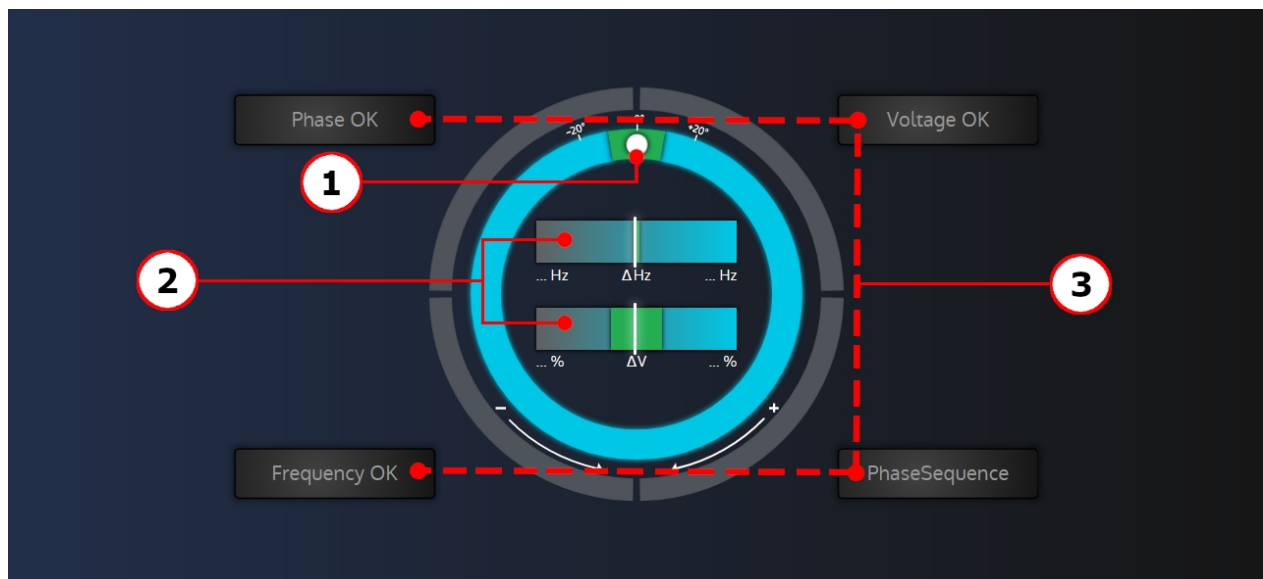
Mains



1. Indicates the presence of a mains electrical alarms/faults.
2. Indicates the ANSI code(s) of the alarms/faults present on the mains.

Note: The color of the fault has priority over the color of the alarm.

SYNCHROSCOPE



This is the graphical object used in the "**Synchronization**" page of **i4Gen**. It allows, during synchronization, to visualize the phase, frequency and voltage differences between the generator and the mains/bus-bar as well as the synchronization conditions.




1. The position of the white circle indicates the phase shift (from -180° to $+179^\circ$) between the generator/power plant and the mains/bus-bar. The green area displayed on the phase circle indicates the maximum phase deviation accepted to allow the circuit breaker to close.
2. In the bar-graphs located in the center of the synchroscope, the cursor position represents the frequency/voltage difference between the generator/power plant and the mains/bus-bar. The green area displayed on each bar-graph indicates the maximum frequency/voltage deviation accepted to allow the circuit breaker to close. If the frequency difference is too high, the cursor becomes red colored and the phase measure (white circle) is not displayed anymore.

3. The four dials around the phase circle represent the synchronization conditions. Each dial is:
 - Colored in grey if the condition is not respected.
 - Colored in green if the condition is respected.


POP-UP

i4Gen can display pop-up windows to give information to the user.

There are three kinds of pop-up windows:

	Notice: Display an information message.
	Warning: Display a warning message.
	Error: Display an error message.

ALARM/FAULT PAGE



Select the "**Alarms/faults**" icon to open alarms/faults page and stop the controller's horn.
This page allows you to view and acknowledge/reset controller alarms/faults when **i4Gen** is connected to the module.

VISUALIZATION

1 DATE	2 HOUR	3 TYPE	4 STATE	5 N°	6 LABEL
18/06/19	17:06:33		ON	254	Input 5
18/06/19	17:06:11		OFF	252	Emergency stop
18/06/19	17:06:07		OFF	254	Input 5
18/06/19	17:02:27		ON	254	Input 5
18/06/19	16:57:36		ON	4303	Mains under voltage
18/06/19	16:57:26		ON	4301	Mains under frequency
18/06/19	16:57:16		ON	252	Emergency stop
18/06/19	11:36:09		ON	4303	Mains under voltage
18/06/19	11:35:59		ON	4301	Mains under frequency
18/06/19	11:35:49		ON	252	Emergency stop
18/06/19	11:22:51		ON	4303	Mains under voltage
18/06/19	11:22:41		ON	4301	Mains under frequency
18/06/19	11:22:31		ON	252	Emergency stop

The fault alarm history is displayed as a table, from the most recent alarm/fault to the oldest one.

Each line in history shows the following information:

1. Date of event activation
2. Time of event activation
3. Event type: alarm (orange) or fault (red)
4. Event status: On or Off
5. The variable number corresponding to the event
6. Event label

The red lines correspond to active faults and the orange lines correspond to active alarms.

RESET/ACKNOWLEDGE



Reset/acknowledge button

Actions:

- Reset alarms/faults that are no longer active.
- Inform the **i4Gen** that alarms/faults have been acknowledged.

Alarm/fault acknowledgment status:

- When alarms/faults are active and have not been acknowledged, the alarm/fault panel blinks red/orange.
- When alarms/faults are active and have been acknowledged, the alarm/fault panel has a fixed color.

ERASE ARCHIVED DATA



Erase archived data

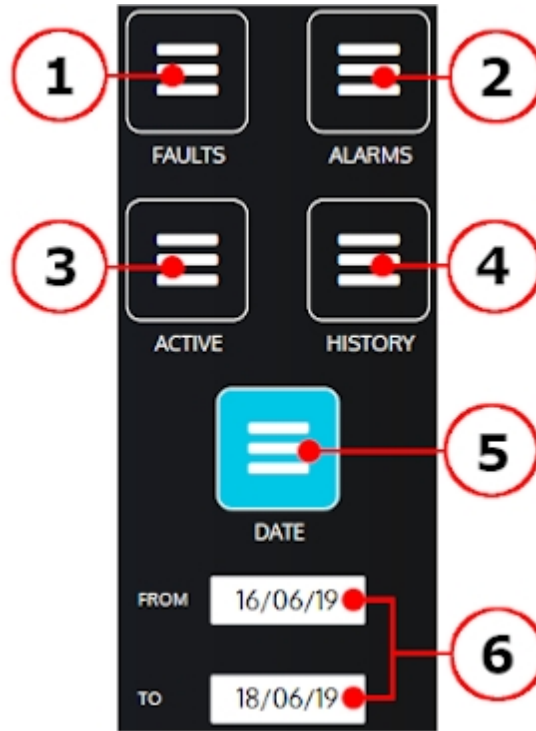
Action:

- Erase controller alarms/faults and archived data.

Note: This button is not available if logged in with level 0 password.

FILTERS

Several filters are available to filter the display of the alarm/fault table. These filters can be combined vertically:



Example of filter configuration: display of active alarms from 16/06/19 to 18/06/19

Description of filters:

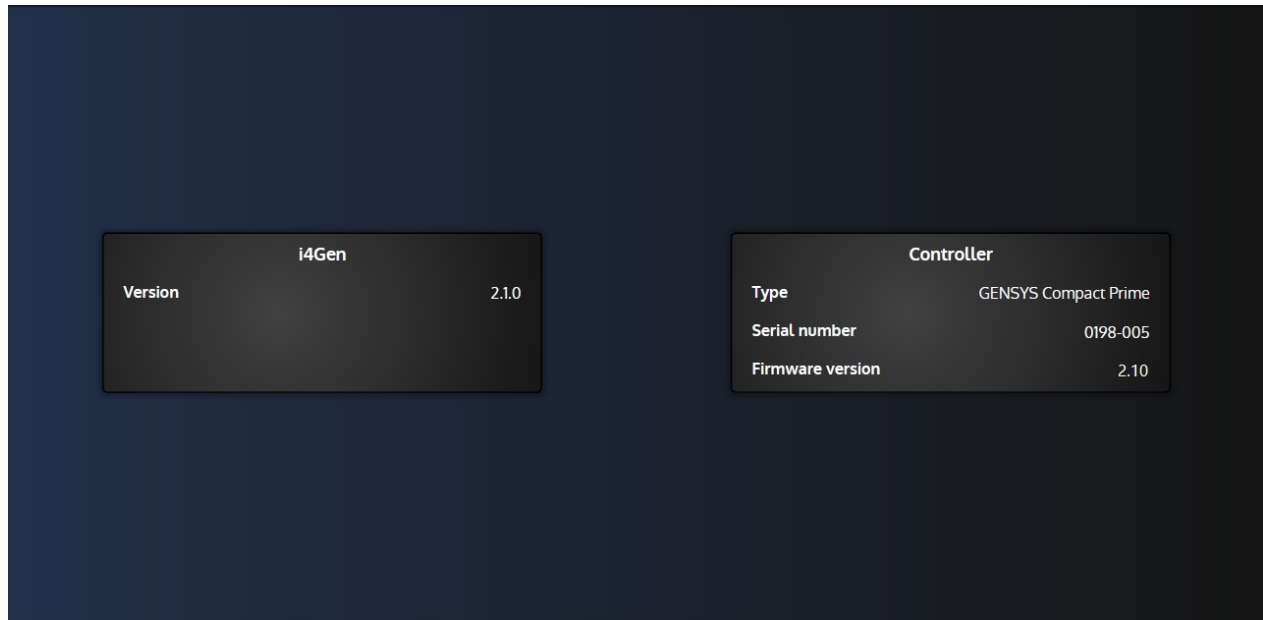
1. Faults: Displays only faults.
2. Alarms: Displays only alarms.
3. Active: Displays only active alarms/faults.
4. History: Displays only alarms/faults history (without active).
5. Date: Displays alarms/faults between two dates.
6. "FROM - TO": Choose the period regarding alarms/faults you are searching for.

Note: You can mix up filters as you wish.

ABOUT PAGE



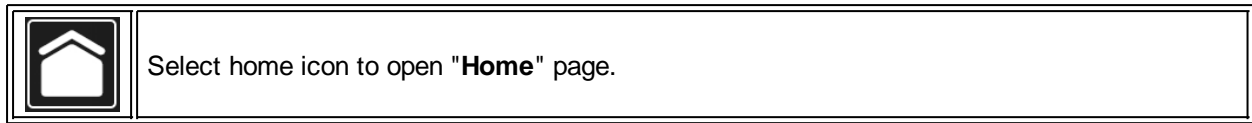
Select the **CRE TECHNOLOGY** logo in the application header to display the "**About**" page.



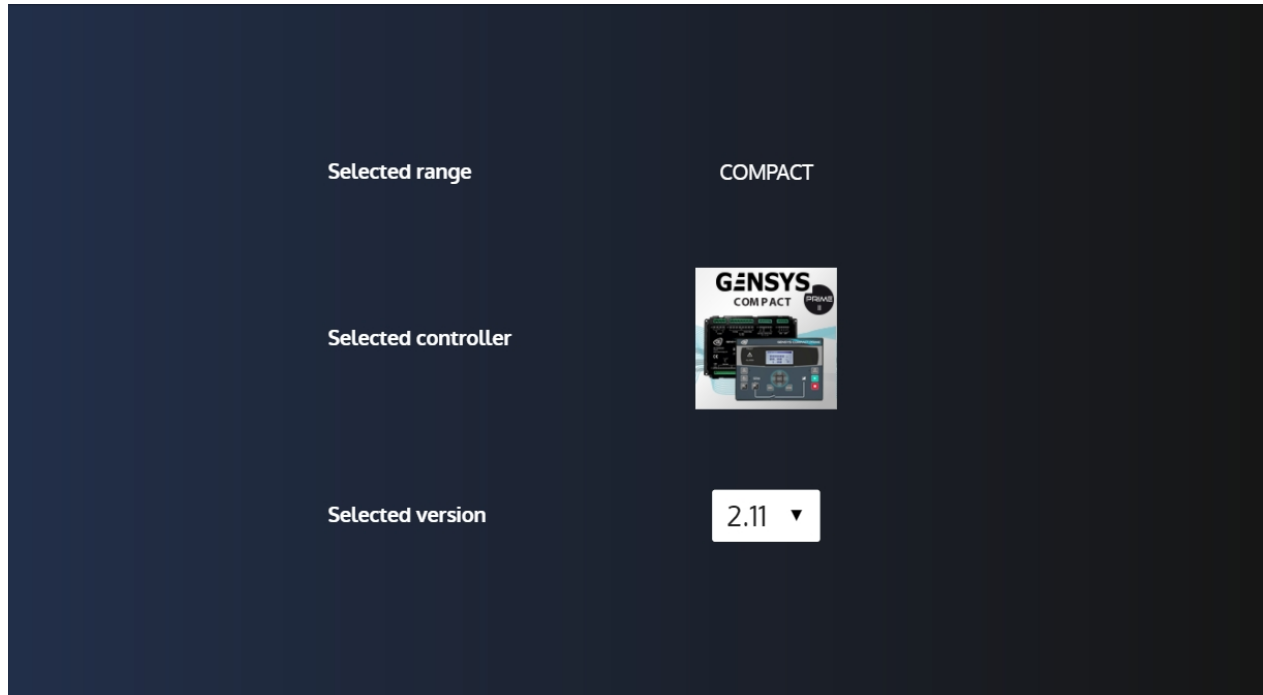
This page displays:

1. An **i4Gen** section with the software version.
2. A controller section with:
 - Type of controller connected to the **i4Gen**.
 - The firmware version of the controller (if connected to a controller).
 - The serial number of the controller (if connected to a controller).

HOME PAGE



Offline Mode



In offline mode, home page allows you to select the controller's model and version you want to manage with your **i4Gen**.

Click on the controller image to load its configuration into the application.

Note: Pressing the current selected controller will show a popup windows asking if you want to reset the current configuration. Beware, switching version and controller's model will reset the current configuration.

Online Mode (Connected to a Controller)

In online mode, home page is a dynamic page whose content changes according to the generator state and the breakers states.

CONTROLLER DYNAMIC SETTINGS



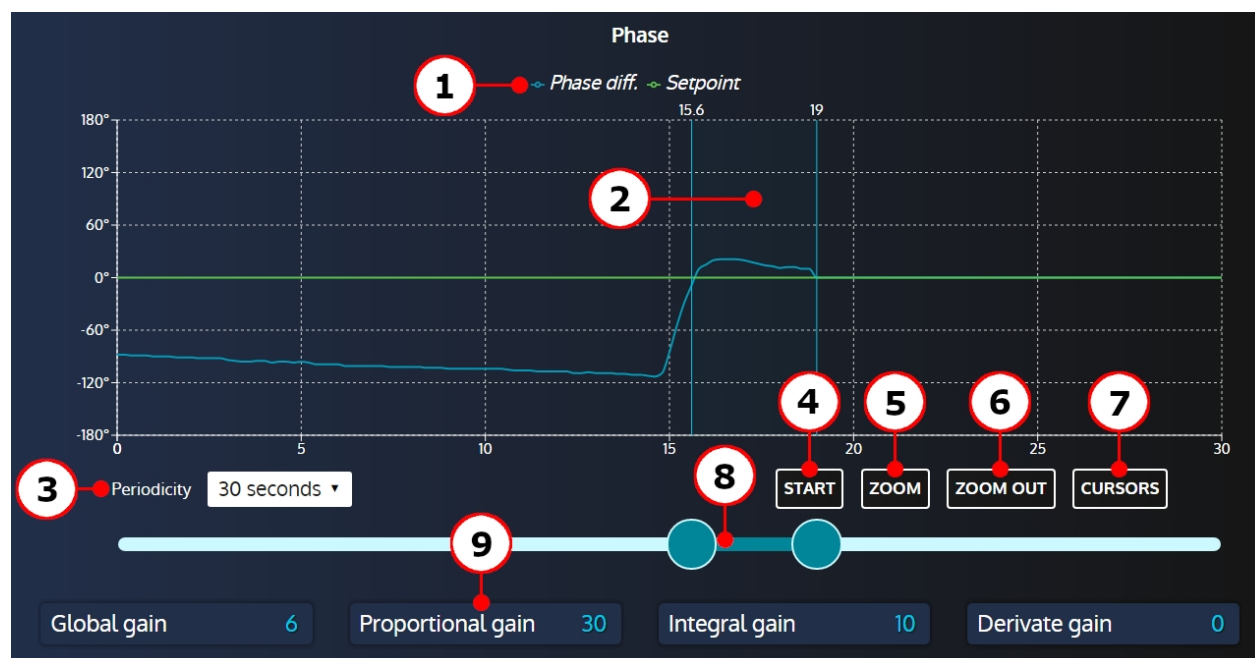
Select "**Controller dynamic settings**" icon to open the menu that gives access to all controller dynamic settings pages.

The dynamic settings pages contain all the parameters you need to set while engine is running.

Note: the number of menu/parameters displayed changes according to the configuration mode (standard/advanced).

CURVES

The PID settings pages provide curves display to help you during PID adjustment.



1. Curves legend.
2. Cursors zoom window.
3. Periodicity of the curve: 30 seconde, 1 minute or 2 minute.
4. Button to start/stop the curve recording.
5. Button to zoom in on the period between the two cursors.
6. Button to zoom out to the initial selected period.
7. Button to display/hide abscisse cursors.
8. Double slider to set the cursors window.
9. Parameters that affect the curve's measure.

CONTROLLER STATIC SETTINGS



Select "**Controller static settings**" icon to open the menu that gives access to all controller static settings pages.

Note: the number of menu/parameters displayed changes according to the configuration mode (standard/advanced).


PARAMETERS CONFIGURATION

The most of "**Controller Settings**" pages contains a list of parameters which are organized into different sections.

General

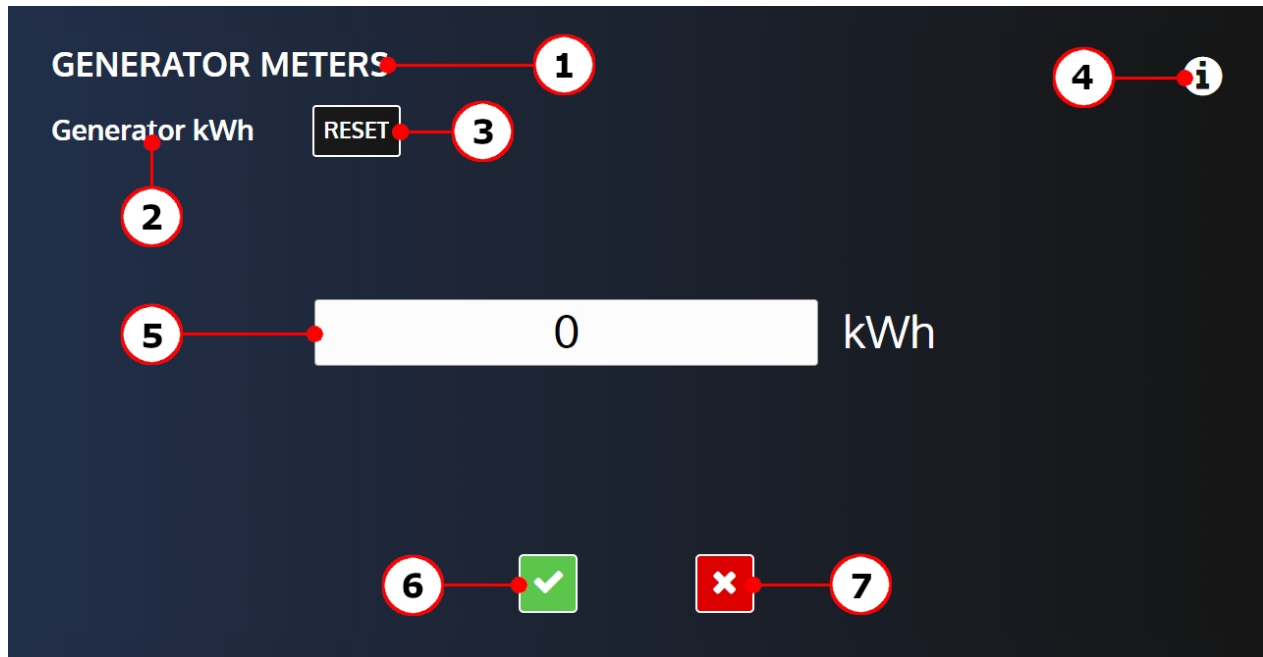
Engine type	Diesel
Speed sensor type	Alternator
Number of poles pair	2
Number of teeth for pick-up	100
Oil pressure switch	Analog input 1
Coolant temperature switch	Analog input 2
Speed setpoint	1500 rpm
Speed setpoint (2)	1800 rpm
Idle speed	700 rpm

Content

SELECTABLE ITEMS	
<div style="background-color: #2c3e50; color: white; padding: 10px; border-radius: 5px; display: flex; justify-content: space-between; align-items: center;"> My number 1 </div>	Parameter display. Select this area to open the editing window.
<div style="background-color: #2c3e50; color: white; padding: 10px; border-radius: 5px; display: flex; justify-content: space-between; align-items: center;"> Number of teeth for pick-up 100 </div>	Disabled parameter display (cannot be edited in this state). This parameter can be enabled by modifying another one on the same page.
<div style="background-color: #2c3e50; color: white; padding: 10px; border-radius: 5px; display: flex; justify-content: space-between; align-items: center;"> GE frequency 0.00 Hz </div>	Read only variable display (supervision measure related to a parameter).
	Open an information pop-up related to the page/section.

EDITING WINDOWS

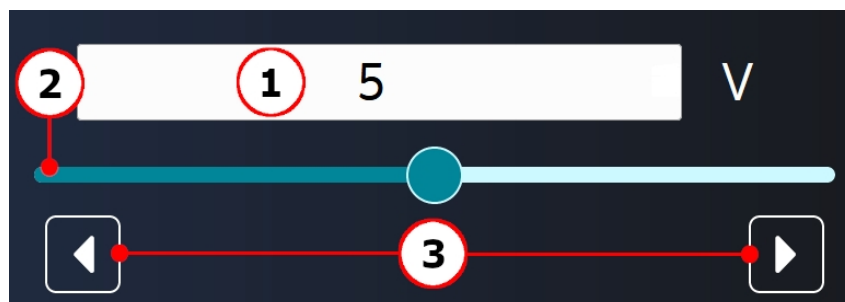
When a configuration variable is selected, an editing window opens to change the variable settings.



1. Title of the configuration section.
2. Label of the configuration variable.
3. Button linked to the configuration variable (optional).
4. Info button: Display the configuration variable number and a description of the variable.
5. Content: The content of the edit window vary depending on the type of variable.
6. Validation button:
 - Save your modification locally in Offline mode.
 - Send your modification to the controller in Online mode.
7. Cancel button: Cancel your modification.

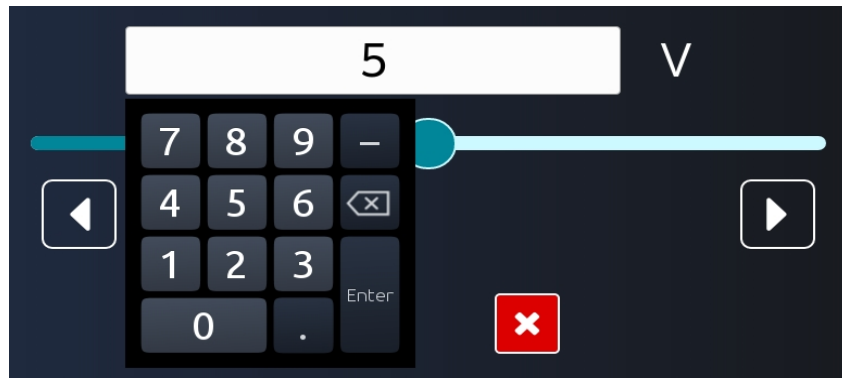
NUMERIC

Input field to set the value of the parameter being edited. The unit of the parameter is displayed beside it.



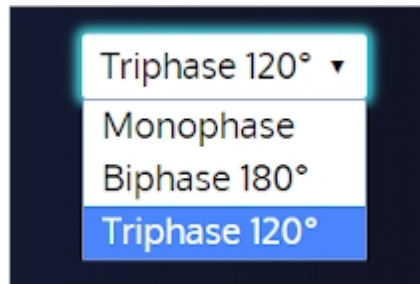
1. Current value and unit of the parameter being edited.
2. Configuration slider.
3. Increment/decrement arrows.

Selecting the input will open a numerical keyboard below it (if there isn't enough space to display the keyboard below, it will open on top):



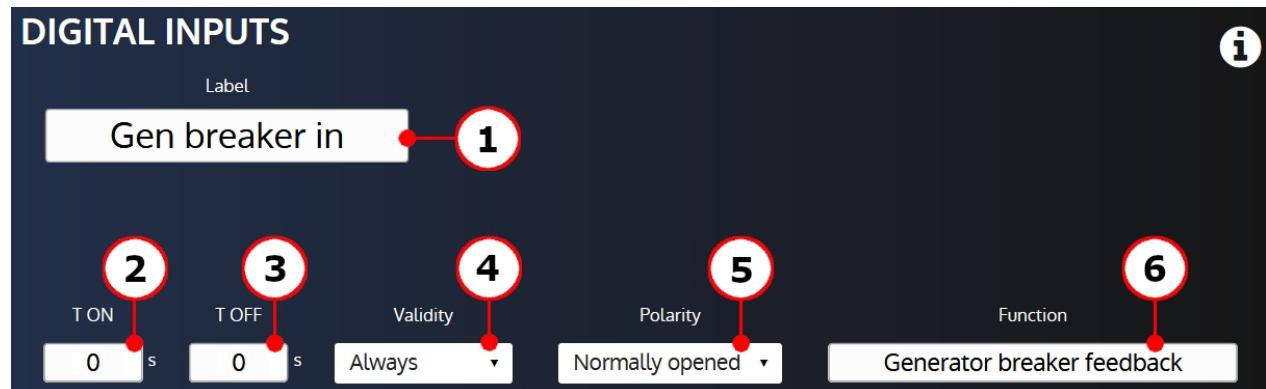
LIST

Some variables can be set through a drop-down list:



Select the list to open the drop-down menu and select an item to change the value.

DIGITAL INPUT



The editing window of digital inputs allows you to configure:

1. Label: The digital input's label (limited to 14 characters).
2. T ON: Delay before which the input becomes active.
3. T OFF: Delay after which the input becomes inactive.
4. Validity: Condition to take the digital input into account.
5. Polarity: Digital input's polarity.
6. Function: Digital input's function.

DIGITAL/RELAY OUTPUT

DIGITAL OUTPUTS

Label

Starter 1

Polarity

Normally de-energized

Function

Starter n°1

Pulse delay

0 s

The editing window of digital/relay outputs allows you to configure:

1. Label: The digital/relay output's label (limited to 14 characters).
2. Polarity: Digital/relay output's polarity.
3. Function: Digital/relay output's function.
4. Pulse delay: Duration of the pulse high state. A pulse delay set to 0 correspond to a continuous activation.

ANALOG INPUT

The analog input editing window is different according to the selected function.

If the analog input is set as a resistive input or 20mA transducer, the editing window shows as following:

ANALOG INPUTS

Label

Analog 1

Unit

mbar

Function

Resistive input

Ohm	mbar
0	0
50	50
100	100
150	150
200	200

It allows you to configure:

1. Label: Analog input's label (limited to 14 characters).
2. Unit: Analog input's unit.
3. Function: Analog input's function.
4. Calibration points: Analog input's calibration points.

If the analog input is set as a digital input, the editing window shows as following:

ANALOG INPUTS ⓘ

Label **1**: Analog 1

Unit **2**: mbar ▼

Function **3**: Remote alarm

Validity **4**: Never ▼

Polarity **5**: Normally opened ▼

Delay **6**: 0 s

It allows you to configure:

1. Label: Analog input's label (limited to 14 characters).
2. Unit: Analog input's unit.
3. Function: Analog input's function.
4. Validity: Condition to take the analog input into account.
5. Polarity: Analog input's polarity.
6. Delay: Delay before which the input becomes active.

TEXT

A text input is available to edit editable texts of the controller (limited to 21 characters):

Text

CRE Technology

PASSWORD

Password Confirm

Two text inputs are available to edit a firmware password:

- Password: enter the new password in this input (limited to 8 characters).
- Confirm: enter the new password in this input in order to make a password verification (limited to 8 characters).

The "**Password**" and "**Confirm**" input content must be the same to validate the password change.

ADVANCED FUNCTIONS

SEARCH ENGINE

1) Adding variables

Select the variable you want to use, using the + button to **the left** of the variable (see below):

GENERAL		
+	Number of generator (V2000)	R/W

In order to facilitate the search for variables, the search engine allow (see below):

<div> <div>ADD/REMOVE</div> <div> <input type="text" value="Search"/> </div> <div> <div>LABEL</div> <div>R/W</div> </div> </div>		
GENERATOR/BUS MEASURES		
+	GE V1 (V50)	R
+	GE V2 (V51)	R
+	GE V3 (V52)	R

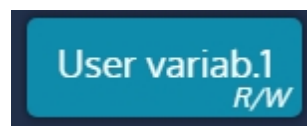
1. A search bar.
2. A filter for the different categories of variables.
3. A filter for the different types of variable (Read / Write).

2) Particularities

Some variables are available only in reading (**Read** , symbolized by a **R**) :



Some variables are available in reading and writing (**Read and Write**, symbolized by a **R/W**) :

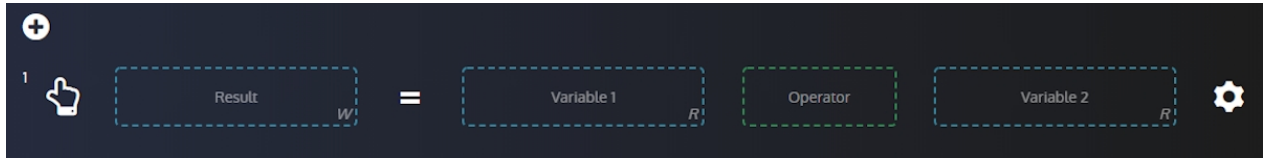


EASY FLEX®

Easy Flex® offers a simple and innovative programming mode, allowing you to adapt the controller to your needs.

This function is presented as a list of operations numbered from 1 to 50.

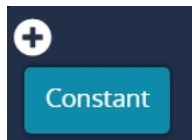
Each line of this table corresponds to an operation between 2 values (see below) :



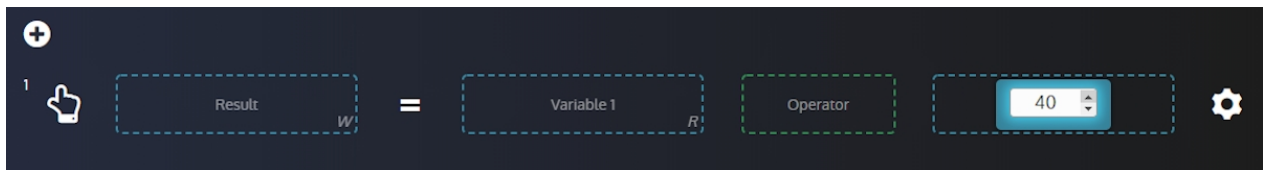
1) Variables

A) EasyFlex Constants

In the **EasyFlex** menu, a **"constant"** block allows you to perform calculations on fixed values :

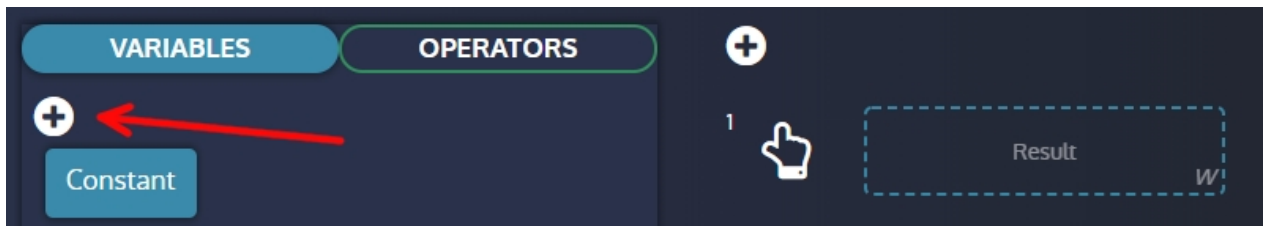


This variable can be used in **Variable 1** or **Variable 2**, here for example in **Variable 2**, having the value 40 (see below):



B) Search Engine : adding variables

The variables that can be added to the list are available on the left of the screen. To add new variables from the list of variables, click on the + button (see below) :



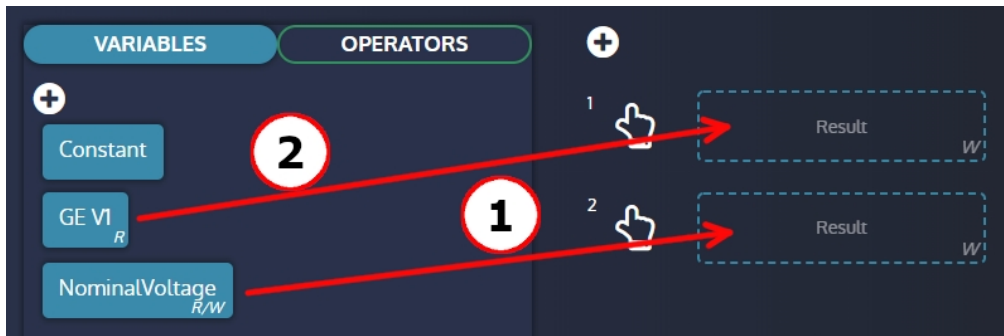
In the **search engine** , you will find the variables that you are going to use.

For more information on the **search engine**, please refer to the menu:

[Search Engine](#)

C) Particularities

Only the variables available **in write** can be deposited in result (see below) :

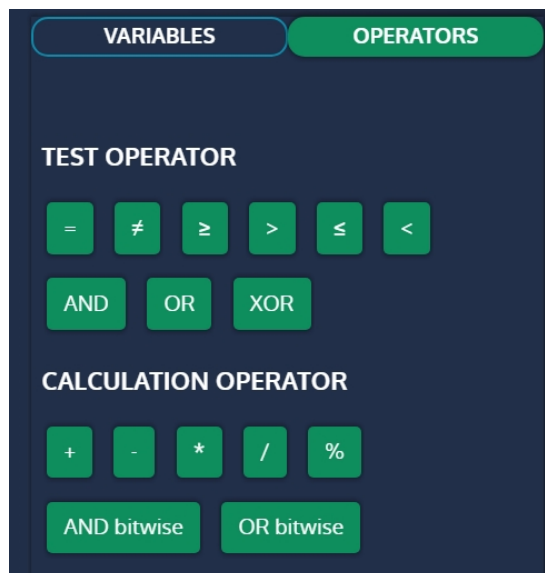


1. Available in reading and writing, this variable can be deposited in "Result".
2. Available in read only, this variable can not be deposited in "Result".

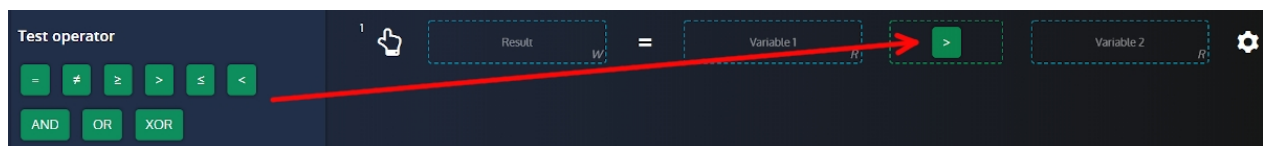
2) Operators and calculations

A) Adding operators

The list of operators is available on the left by clicking on the "Operators" tab (see below) :



You can then **drag and drop** them into the "Operator" box provided for this purpose. (see below) :



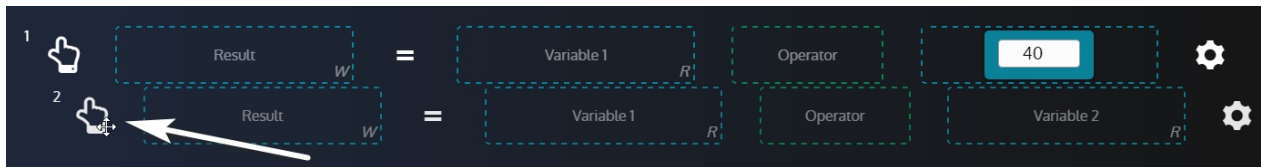
B) Use of operators

- Calculation operators return an **analog** result.
- The test operators return a **boolean** result (0 or 1)

C) Moving an operation line

An **operation is executed** every **100ms** and the operations are executed in the order determined by the numbers at each beginning of the line.

The operations can be moved thanks to the icon located at the beginning of line (see below) :



D) User variables

All user variables (**available for reading and writing**) can be assigned and used in the equations. For example, the result of an equation can be stored in a user variable, then you can use this result to make a calcul in the following equations.

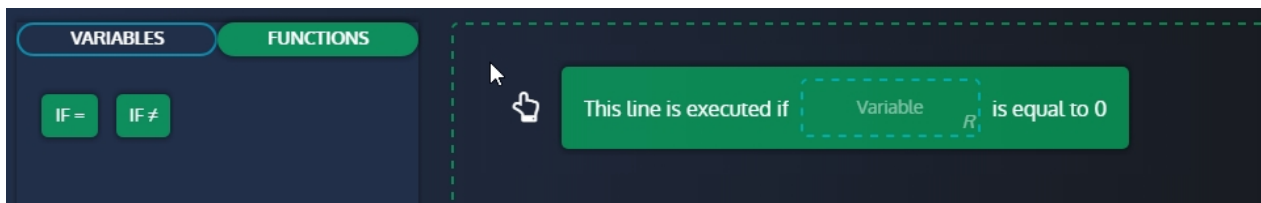
3) Advanced functions for calculation operators

Advanced features, such as execution conditions, are available by clicking on the setting icon located to the right of each line :

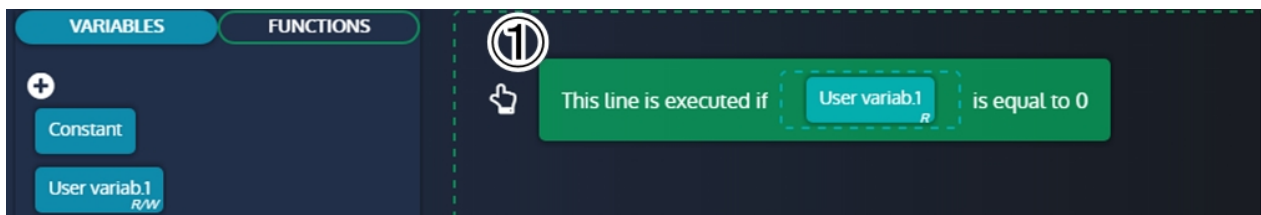


A) Conditions

These 2 functions (if equal and if not equal) allow you to execute the associated line only if the condition is valid.



Example:



1. Here, the operation is executed if the variable User variab.1 is equal to 0. The operation is not executed if the variable User variab.1 is different from 0.

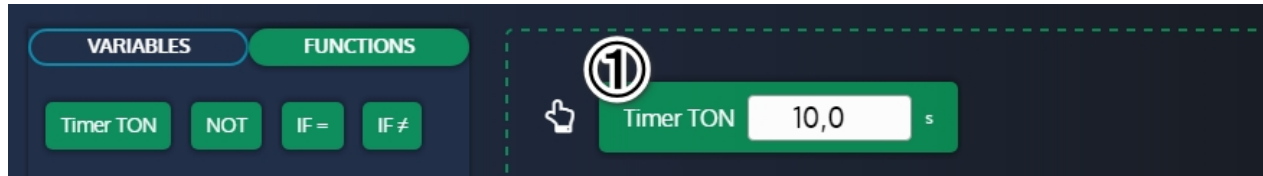
4) Advanced functions for test operators

Advanced features, such as execution conditions, are available by clicking on the setting icon located to the right of each line :



A) Timers

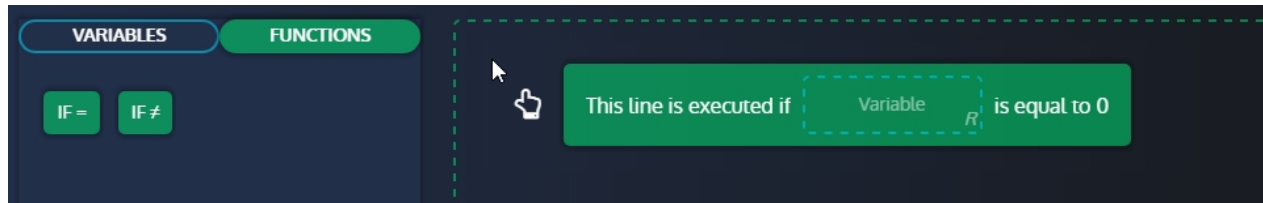
Timers are available **only** on functions that contains a test operator . Example with a function that contains **a Timer** :



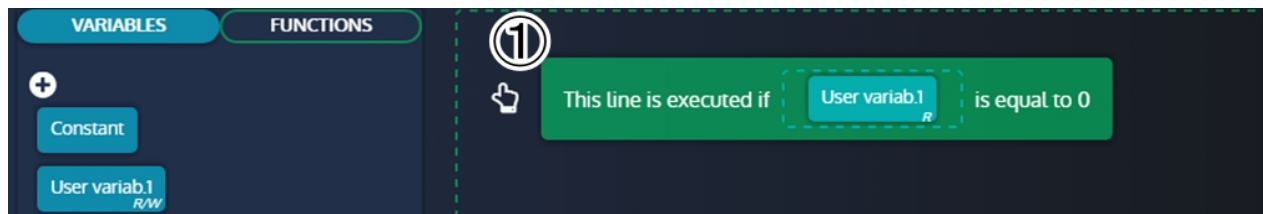
1. The test result is updated if the test is validated for 10 seconds. Without using the "TIMER TON" function, no delay is applied.

B) Conditions

These 2 functions (if equal and if not equal) allow you to execute the associated line only if the condition is valid.



Example :



1. Here, the operation is executed if the variable User variab.1 is equal to 0. The operation is not executed if the variable User variab.1 is different from 0.

C) "NOT" function

Example: Here the user variable 1 takes the value 1 if GE U31 is **HIGHER** than GE U23.



With the addition of the NOT function in the advanced functions :



User variable 1 now takes the value 0 if GE U31 is **HIGHER** than GE U23.
The NO function is used to **invert the boolean result**.

5) Easy Flex® warning

Variable [4214] provides more information on the **Easy Flex®** warning alarm.
This is how variable 4214 is calculated:

[4214] = (100 * line concerned) + type of error

Here are the different types of errors:

- 1: operand 1 or 2 is invalid.
- 2: unknown operator.
- 3: The variable "result" is 0.
- 4: The variable "result" is read-only.
- 5: The result is outside the allowed range of the target variable.
- 6: Overflow on at least one equation.
- 7: Division by 0.

ALTERNATIVE SELECTION

The **Alternative Selection** menu offers a supplement to **Easy Flex®** programming.

This function is presented as 16 selections between two values.



1) Adding variables

The variables that can be added to the list are available on the left of the screen. To add new variables from the list of variables, click on the + button (see below) :



In the **search engine** , you will find the variables that you are going to use.
For more information on the **search engine**, please refer to the menu:
[Search Engine](#)

2) Adding "selections"

Selection variables are **booleans** (0 or 1) used to assign different values to the associated parameter (see below) :



1. Variable of selection.
2. Associated parameter.
3. Value to assign.

Sel alt. EL1 = 0 then NominalVoltage will take the value 300.

Sel alt. EL1 = 1 then NominalVoltage will take the value 2000.

Please note that if a variable is used in an alternative selection, modifying this variable from front face, Modbus and any other sources will always result in its value being overwritten by the alternative selection.

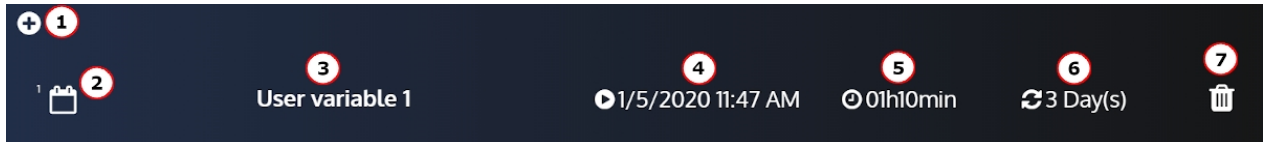
SCHEDULER

The **scheduler** can activate any function that can be controlled by a digital input. These functions can be activated one or many times.

This function is presented as a list. Each line in this list corresponds to an event.

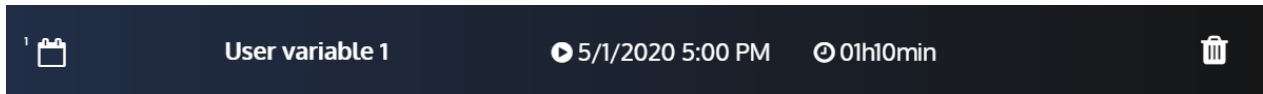
1) Description of the Scheduler list

In the Configuration tab > Calendar, you will have access to all the events that you create.



1. Add an event.
2. Number of the event.
3. Active function during the event.
4. First time the event will take effect.
5. Duration of the event.
6. Frequency.
7. Delete the event.

It is also possible to have an event without periodicity, it will not repeat itself:



2) Description of the Settings

By clicking on the event you want to modify, you will have access to these parameters which will allow you to configure the event:

The screenshot shows a configuration form for an event. It has a dark background with white text and input fields. The fields are:

- Function:** A text box containing 'Led test'.
- Starting date/time:** A text box containing '4/17/2019 - 11:47 AM'.
- Duration:** Two text boxes for '24' and '10', followed by 'h' and 'min' labels.
- Periodicity:** A dropdown menu showing 'Daily'.
- Every:** A text box containing '1', followed by 'Day(s)'.
- Confirmation:** At the bottom, there is a green checkmark button and a red 'X' button.

 Numbered callouts (1-6) are placed next to each field: 1 next to Function, 2 next to Starting date/time, 3 next to Duration, 4 next to Periodicity, 5 next to Every, and 6 next to the confirmation buttons.

1. Function active during the event.
2. First time the event will take effect.
3. Duration of the event.
4. Setting the periodicity (period).
5. Setting the repetition of the periodicity (X period (s)).
6. Confirm or Delete.

3) Description of the Supervision

Available in Supervision > Scheduler :

The screenshot shows a supervision scheduler interface. It has a dark background with white text and icons. The elements are:

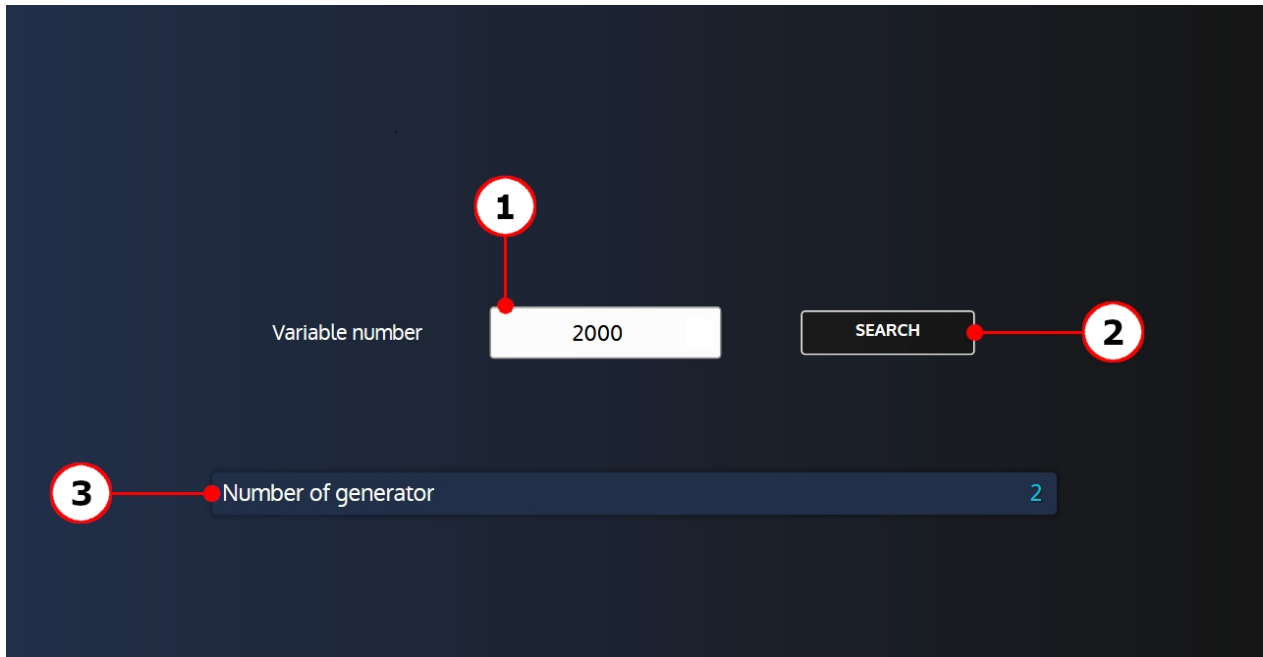
- Event Number:** A small icon of a calendar with the number '1' next to it.
- Function:** The text 'Stop horn'.
- Next Time:** A play button icon followed by the text '7/16/2019 2:46 PM'.
- Duration:** A clock icon followed by the text '01h00min'.
- Periodicity:** A circular arrow icon followed by the text '1 Day(s)'.
- Indicator:** A small grey circle.

 Numbered callouts (1-6) are placed above each element: 1 above the event number, 2 above the function, 3 above the next time, 4 above the duration, 5 above the periodicity, and 6 above the indicator.

1. Number of the event.
2. Function active during the event.
3. Next time the event will take effect (be careful , not the same as the config because this one is actualised).
4. Duration of the event.
5. Periodicity.
6. Indicator On / Off.

MODIFICATION BY VARIABLE NUMBER

The page titled "**Modification by variable number**" allows to search for a controller parameter through a search engine, and to change its value at your convenience:



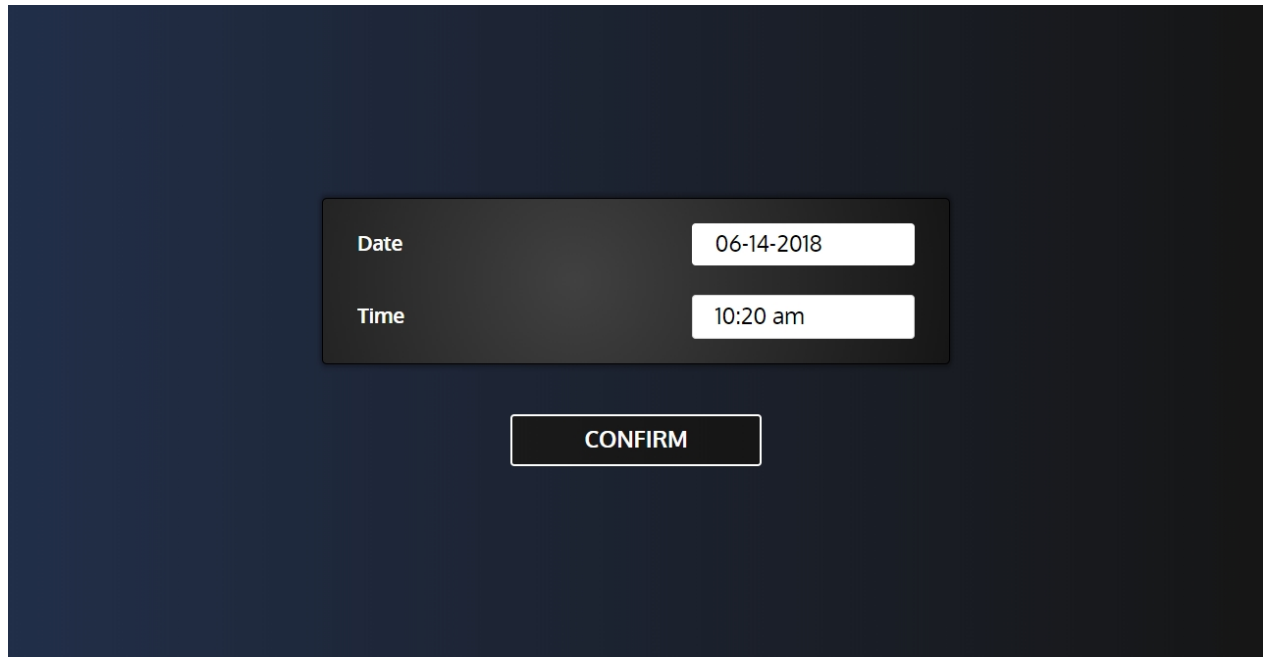
To change the value of a parameter:

1. Press the variable input field to open the search engine.
2. Search for the variable you want in the search engine.
3. Press the "+" button to select the variable you want to modify.
4. Press the parameter that has just been displayed to enter the editing mode.

Note: If the variable is not a parameter, it will still be displayed but greyed out and cannot be changed.

SYSTEM

DATE/TIME SETTINGS



Date	06-14-2018
Time	10:20 am

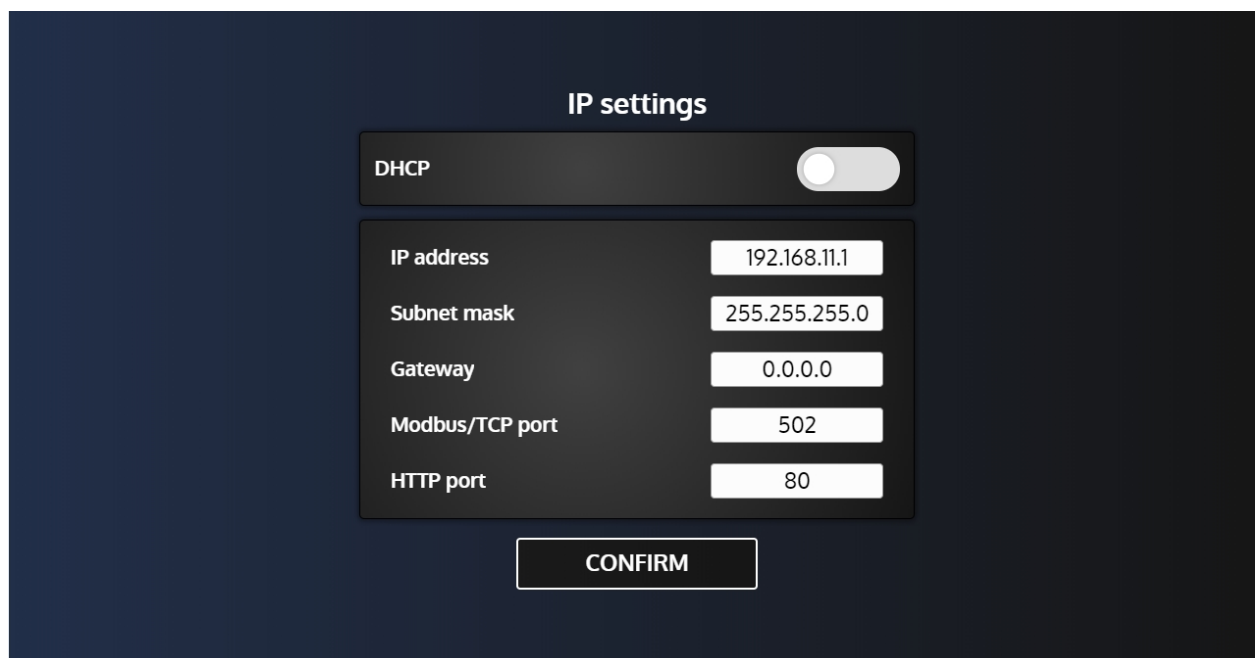
CONFIRM

The "**Date/Time**" page allows you to configure the controller date/time:

- Date: Select the editable field to display a calendar and set up the controller date.
- Time: Select the editable field to set up the controller time.
- Confirm button: Write the date/time change into the controller.

IP SETTINGS

The "**IP settings**" page retrieves and displays the controller network configuration when the page opens, and allows you to change this configuration:



The screenshot shows the "IP settings" configuration interface. It features a "DHCP" toggle switch at the top, which is currently disabled. Below the toggle is a form containing five input fields for manual configuration: "IP address" (192.168.11.1), "Subnet mask" (255.255.255.0), "Gateway" (0.0.0.0), "Modbus/TCP port" (502), and "HTTP port" (80). A "CONFIRM" button is located at the bottom of the form.

By default, the IP address of the controller is 192.168.11.1.

There are two different types of configuration:

- **DHCP Configuration (automatic):** If the device is connected to a DHCP server, you can enable the "DHCP" setting to automatically assign an IP address to it.
- **Manual Setup:** To manually configure the device network settings, disable the "DHCP" setting, then fill in the "IP address" and "Subnet Mask" fields.

Controller port numbers can be set in both configurations.

For most networks, it is not necessary to inform the gateway or to modify port numbers. For complex networks, contact your network administrator to make the correct configuration.

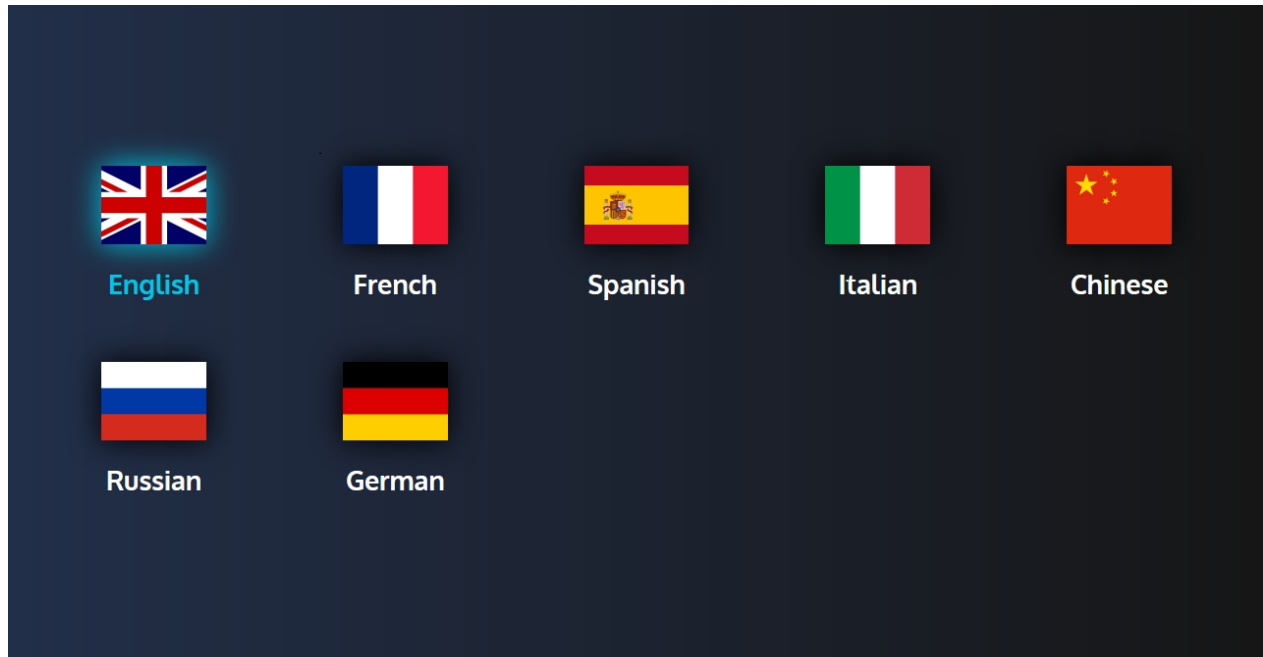
APPLICATION SETTINGS



"**Application settings**" part allows user to display and modify the **i4Gen** settings.
Press settings icon to open the menu that gives access to all **i4Gen** settings pages.

LANGUAGE

The "**Language**" page allows you to change the application's language by selecting one of the corresponding flag:

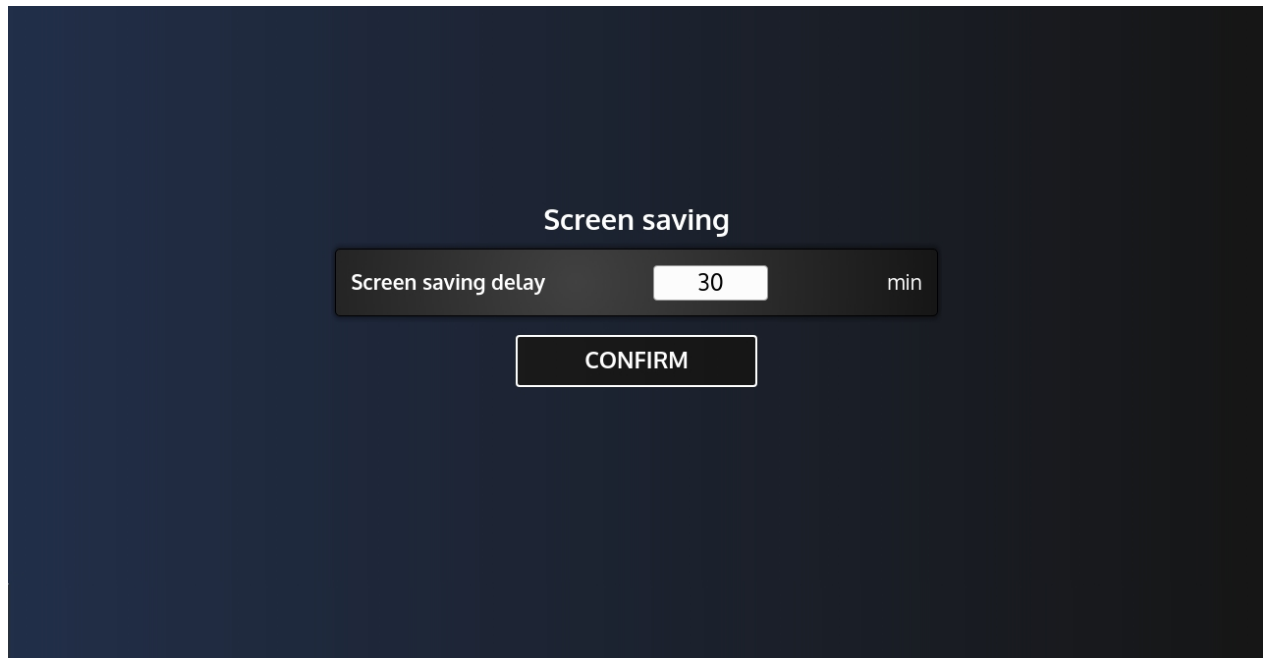


The languages available are:

- French
- English
- Spanish
- Italian
- Chinese
- Russian
- German

SCREEN

The "**Screen**" page allows you to configure the **i4Gen** screen parameters:



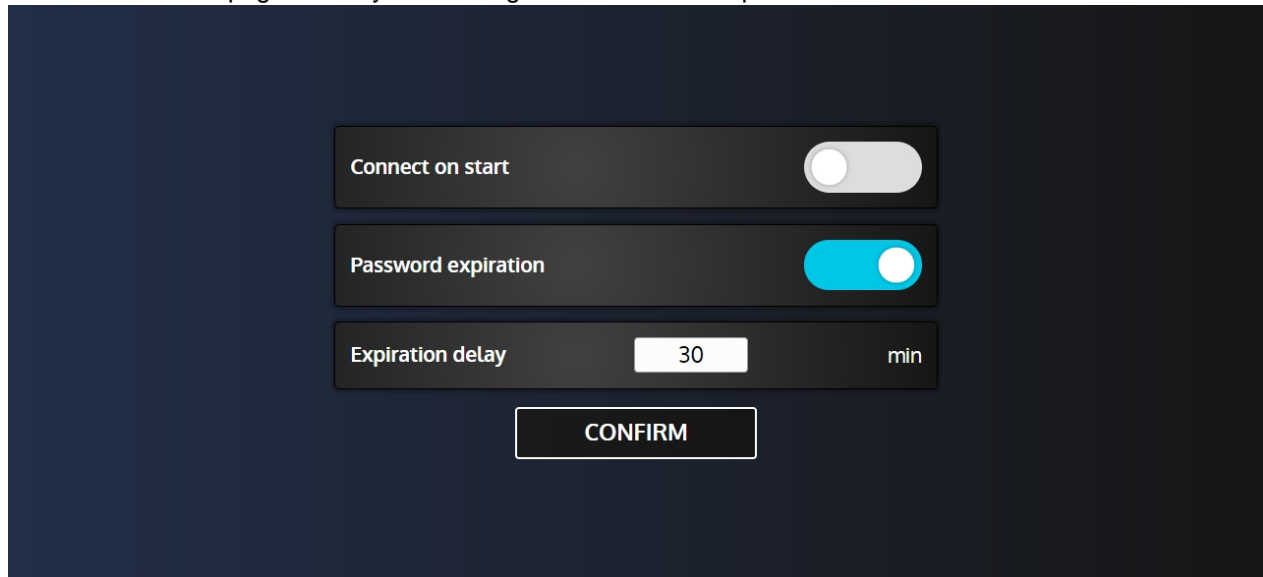
Screen Saver

The screen saver section is used to set the **i4Gen** screen saver.

- **Screen saver delay:** Allows you to configure the inactivity delay after which the screen saver appears.

CONNECTION

The "**Connection**" page allows you to configure the connection parameters of the **i4Gen**:

The screenshot shows a dark-themed configuration interface for the 'i4Gen' device. It features three settings: 'Connect on start' with a grey toggle switch, 'Password expiration' with a blue toggle switch, and 'Expiration delay' with a text input field containing '30' and a 'min' unit label. A 'CONFIRM' button is located at the bottom of the settings area.

Connect on Start

This parameter is used to activate/deactivate the automatic connection to a controller on **i4Gen** starting. By default, the **i4Gen** will attempt to connect to IP address 192.168.11.1. If the IP address has been modified and saved via the "**Preferences**" page, then the **i4Gen** will attempt to connect to that address.

Password Expiration

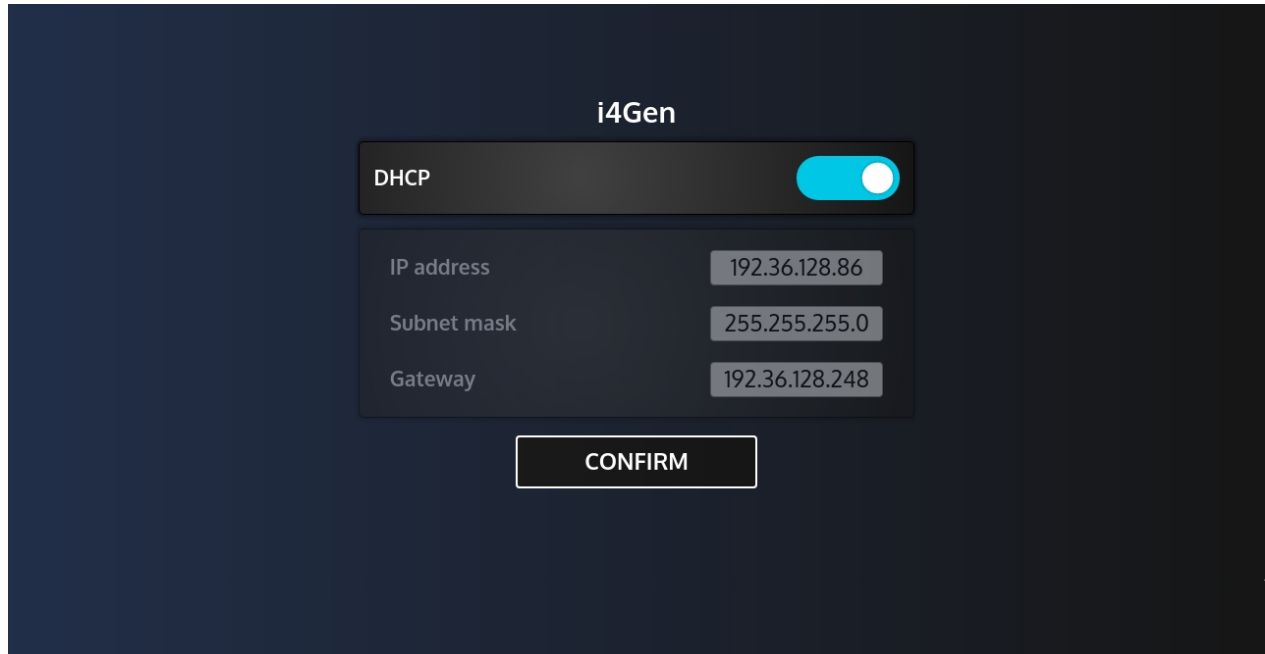
This parameter is used to enable/disable the password level expiration.

Expiration Delay

If the password expiration is enabled, this parameter is used to configure the delay after which the password will expire.

NETWORK

The "**Network**" page retrieves and displays the **i4Gen** network configuration when the page opens, and allows you to change this configuration:



The screenshot shows a dark-themed configuration window titled "i4Gen". At the top, there is a "DHCP" label next to a blue toggle switch that is turned on. Below this, there are three rows of configuration fields, each with a label on the left and a text input field on the right. The first row is "IP address" with the value "192.36.128.86". The second row is "Subnet mask" with the value "255.255.255.0". The third row is "Gateway" with the value "192.36.128.248". At the bottom center of the window is a white button with the text "CONFIRM".

By default, the IP address of the **i4Gen** is 192.168.11.50 and the IP address of the controller is 192.168.11.1.

There are two different types of configuration:

- **DHCP Configuration (automatic):** If the device is connected to a DHCP server, you can enable the "DHCP" setting to automatically assign an IP address to the device.
- **Manual Setup:** To manually configure the device network settings, disable the "DHCP" setting, then fill in the "IP address" and "Subnet Mask" fields.

Controller port numbers can be set in automatic or manual setup.

For most networks, it is not necessary to inform the gateway or to modify port numbers. For complex networks, contact your network administrator to make the correct configuration.

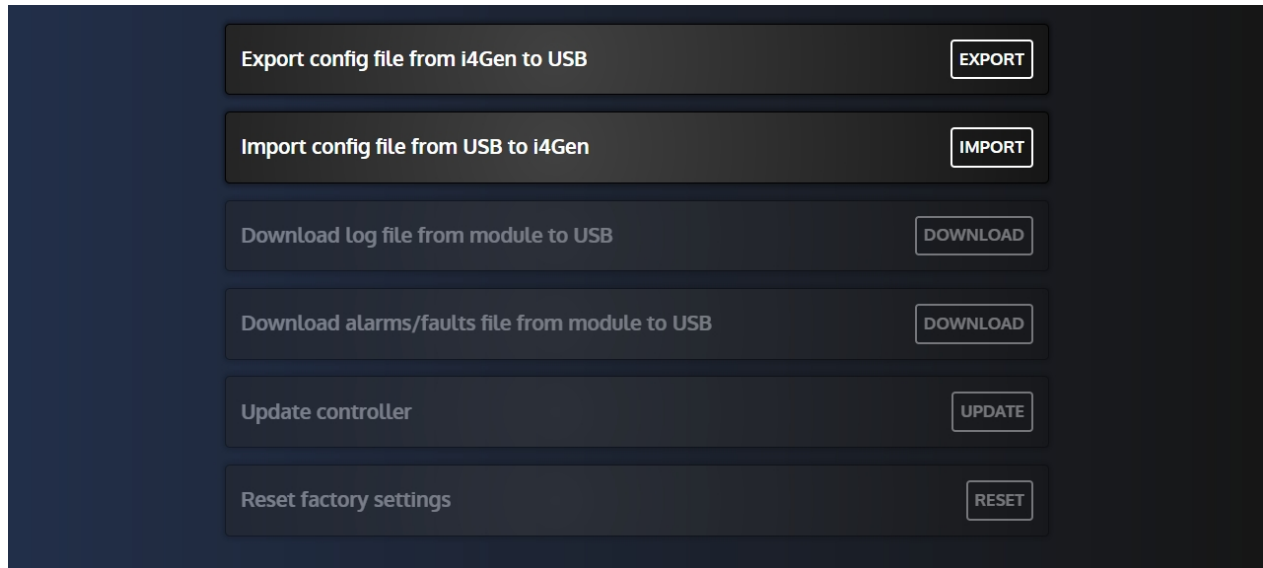
FILE TRANSFER

File transfer page allows you to make file transfers between **i4Gen** and a USB key in offline mode and between your controller and a USB key if **i4Gen** is connected to a controller.

All the buttons of this page open a browser popup that allows you to browse files, enter filenames...

Offline Mode

File transfer page in offline mode. Only two option are available:



Export file from i4Gen to USB

This function allows you to export the **i4Gen** config file to an USB key:

1. Connect an USB key.
2. Click on the "**Export**" button to open the browser pop-up.
3. Select the folder in which you want to export the config file.
4. Enter the name you want to attribute to your config file in the "**File name**" input. If no name is entered, a default config file name is applied.
5. Click on the browser "**Export**" button to start the export.
6. If the export is successful, a success message is displayed.

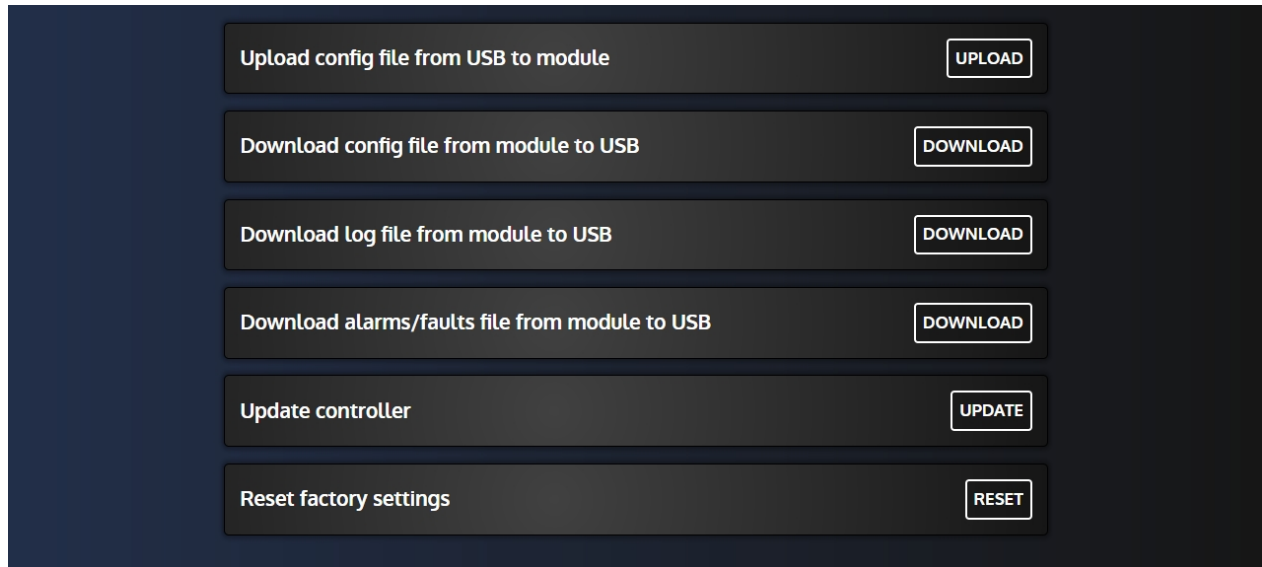
Import file from USB to i4Gen

This function allows you to import a config file from an USB key into your **i4Gen**:

1. Connect an USB key to the **i4Gen**.
2. Click on the "**Import**" button to open the browser pop-up.
3. Browse and select the config file you want to import in the **i4Gen**.
4. Click on the browser "**Import**" button to start the import.
5. If the importation is successful, a success message is displayed.

Online Mode (connected to a controller)

File transfer page in online mode. In online mode, four option types are available:



Upload file from USB to module (Level 1)

This function allows you to upload a config file from an USB key to the controller:

1. Connect an USB key to the **i4Gen**.
2. Click on the **"Upload"** button to open the browser pop-up.
3. Browse and select the config file you want to upload to the controller.
4. Click on the browser **"Upload"** button to start the upload.
5. If the upload is successful, a success message is displayed.

Download file from module to USB (Level 1)

This function allows you to download a config/alarms & faults/log file from your controller to an USB key:

1. Connect an USB key to the **i4Gen**.
2. Click on the **"Download"** button to open the browser pop-up.
3. Select the folder in which you want to download the file.
4. Enter the name you want to attribute to your file in the **"File name"** input. If no name is entered, a default file name is applied.
5. Click on the browser **"Download"** button to start the download.
6. If the download is successful, a success message is displayed.

Update controller (Level 1)

This function allows you to update your controller firmware with an archive version located on an USB key :

1. Connect an USB key to the **i4Gen**.
2. Click on the **"Update"** button to open the browser pop-up.
3. Browse and select the archive version you want to send to your controller.
4. Click on the browser **"Update"** button (and then press **"OK"** in the confirmation pop-up) to start the update.
5. Wait until all of update's steps are completed:
 - Updating firmware
 - Module initialization
 - Upload of language files
6. If the update is successful, a success message is displayed.

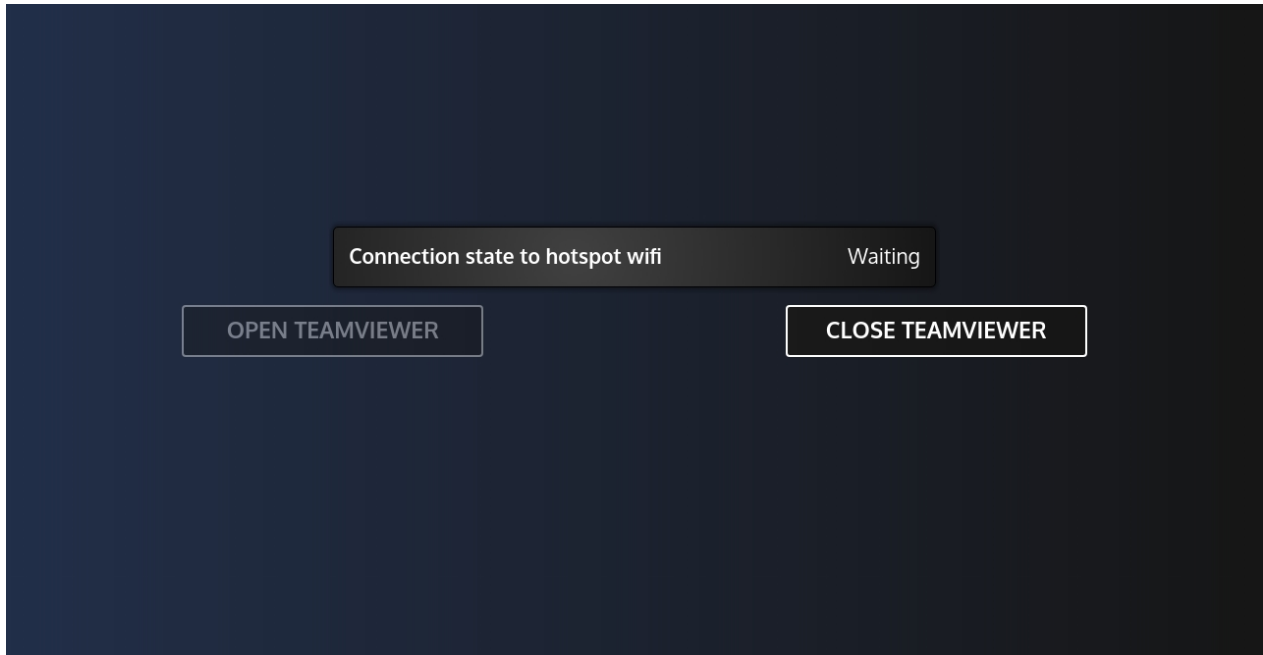
Reset factory settings (Level 2)

This function allows you to reset controller configuration to factory settings:

1. Click on the **"Reset"** button.
2. If reset is successful, a success message is displayed.

SUPPORT

The "**Support**" page allows the **CRE Technology** support team to connect to your **i4Gen** remotely:



When this page is opened, the **i4Gen** will automatically attempt to connect to a WIFI access point configured as follows:

- **SSID: SUPPORT-WIFI**
- **Password: 12345678**

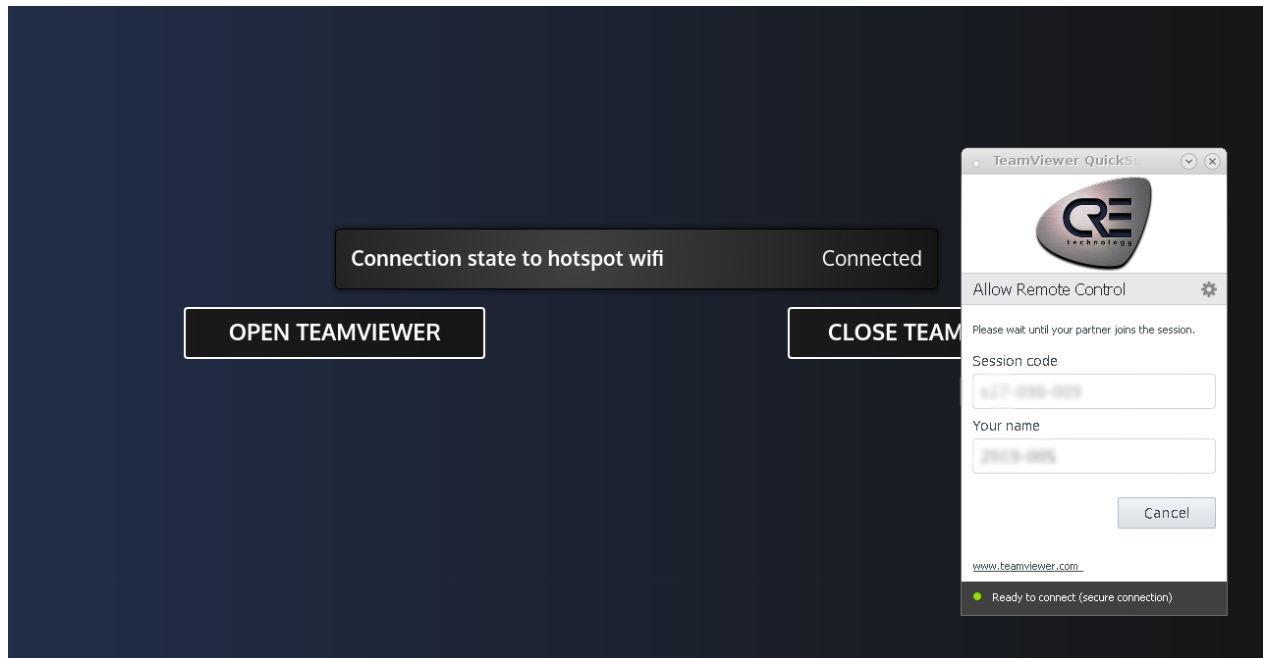
To allow remote support on a site that does not have Internet access, it is possible to use your smart-phone as a WIFI access point giving access to the Internet. For that:

- Go to your smartphone's access point/share connection settings.
- Set the access point name and password as above.
- Enable WIFI and connection sharing on your smart-phone.

Now your smart-phone should act as a WIFI access point and be detected by the **i4Gen**.

When the **i4Gen** detects the WIFI access point, "**WIFI hotspot connection status**" must change to "**Connected**" and the "**OPEN TEAMVIEWER**" button must be cleared.

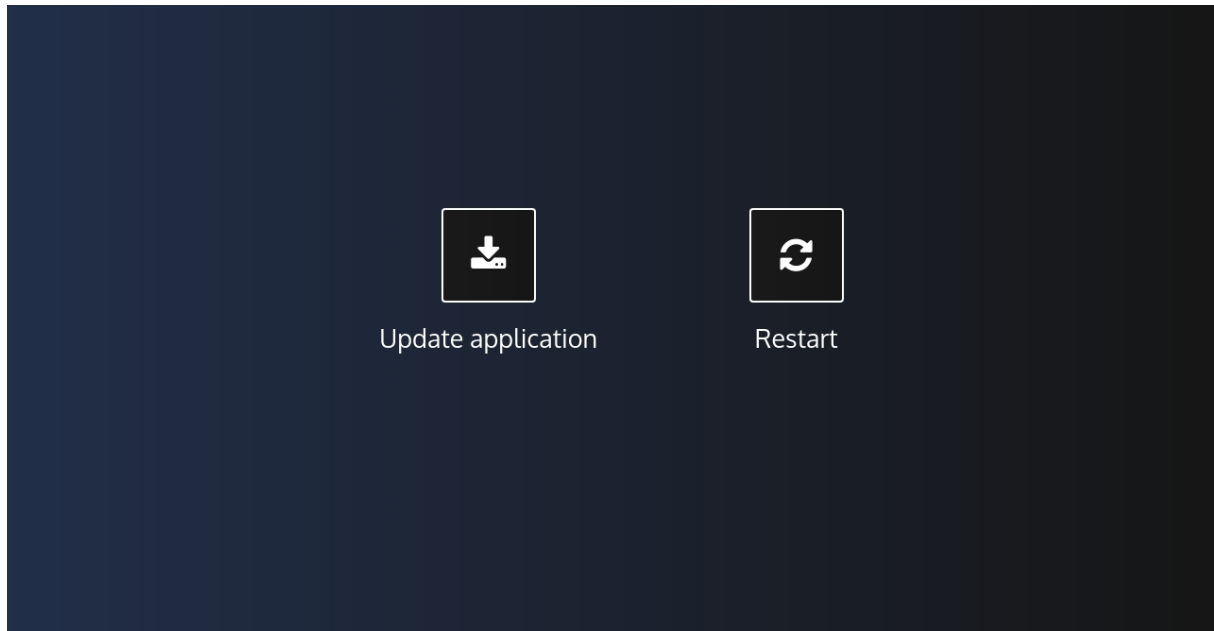
Press the "**OPEN TEAMVIEWER**" button to launch the TeamViewer© software:



This may take a few seconds. A TeamViewer© window should appear on the screen. Check that the TeamViewer© connection status is "**Ready to connect**" and communicate the name of your **i4Gen** to **CRE Technology** support (name indicated in the "**Your name**" field). The **CRE Technology** support team can now take over your **i4Gen**. To close TeamViewer© properly, press the "**CLOSE TEAMVIEWER**" button.

SYSTEM

The "**System**" page includes two buttons:



Restart

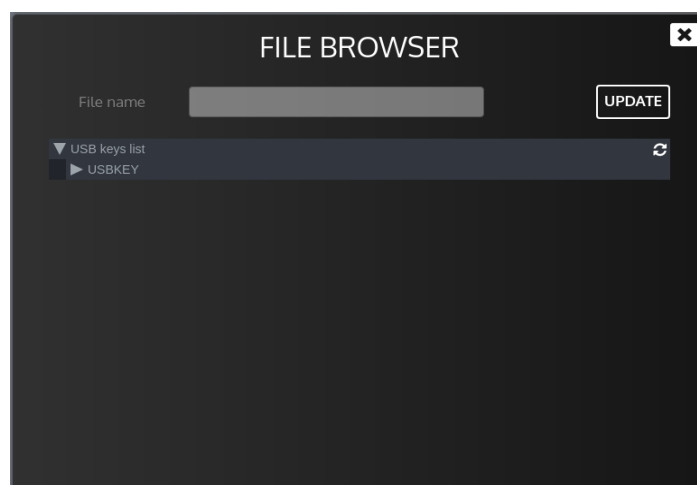
Press it to restart the **i4Gen**.

Update i4Gen

This allows you to update the **i4Gen** application version.

Update procedure

1. Connect a USB key containing the **i4Gen** update archive. Then press "**Update application**" button to open a browser pop-up:



2. Browse on your USB stick via the folder tree and select the update archive. You can press the



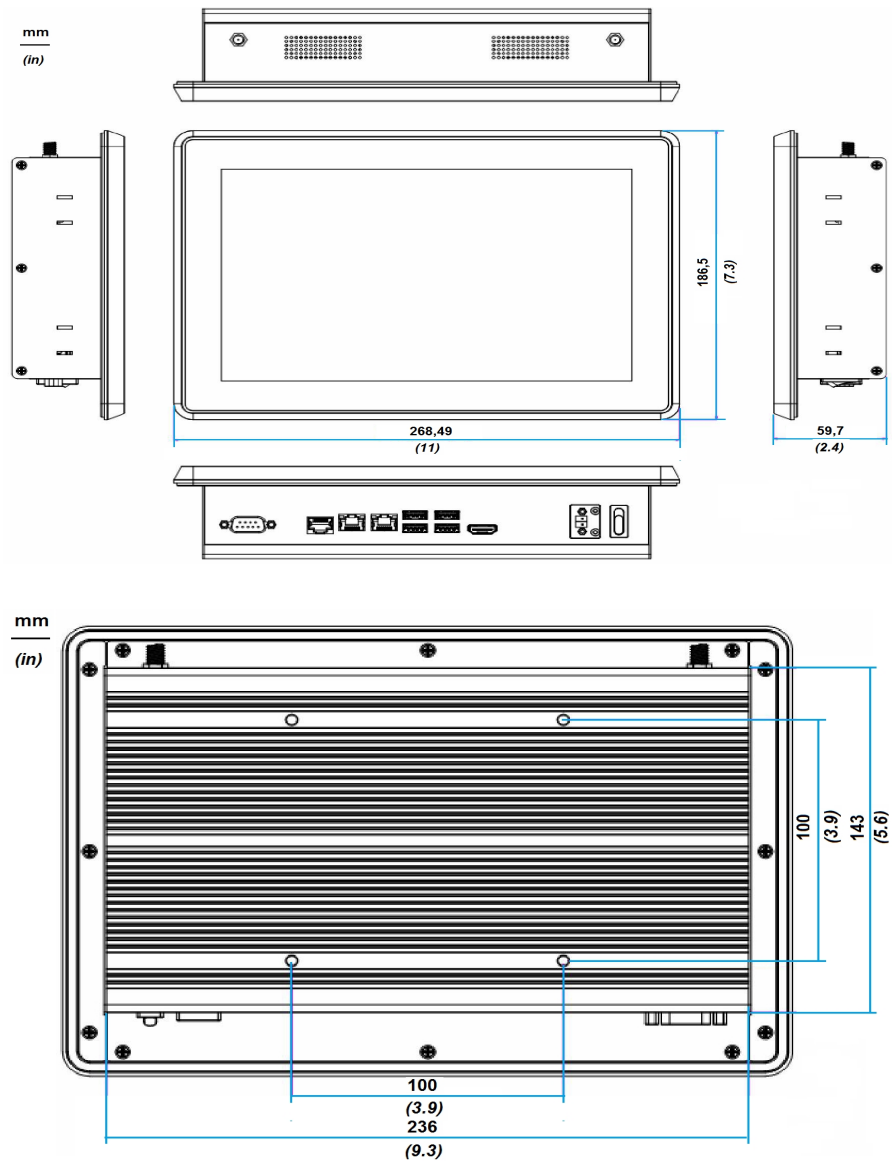
- button to refresh the **i4Gen** USB device display.
3. Press the "**Update Application**" button to check the contents of the archive. A confirmation window should appear on the screen, press "**Confirm**" to start the update.
 4. Once the update is done, the **i4Gen** restarts automatically.



WARNING

Do not remove the USB key during the update to avoid disrupting file transfer.

DIMENSIONS



Note: Measure unit: mm