Operation Manual

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Note*:* All the strings representing programming menus in this manual are indicative only. The strings displayed by the instrument have been shortened for proper readability and viewing on the display.

GENERAL INFORMATION REGARDING THE MANUAL

Compliance with the operative procedures and the precautions described in this manual is an essential requirement for the correct operation of the instrument and to guarantee total operator safety.

Before using the instrument, the manual must be read in all of its parts, in the presence of the instrument itself, in order to ensure that the operating modes, the controls, the connections to the peripheral equipment and the precautions for safe and correct use are clearly understood.

The user manual must be stored, integral and legible in all parts, in a safe place which can be quickly and easily accessed by the operator during installation, use and/or installation revision operations.

CONVENTIONS

The present user manual uses the following conventions:

NOTE

The notes contain important information to be highlighted in comparison to the rest of the text. These generally contain information that is useful to the operator to carry out and optimize operating procedures of the equipment in a correct manner.

WARNING

Warning messages appear in the manual before procedures or operations that must be observed in order to avoid any possible losses of data or damages to the equipment.

ATTENTION

Attention messages appear in the manual in correspondence to description of procedures or operations which, if carried out incorrectly, may cause damages to the operator or users.

LIMITATIONS OF USE AND SAFETY PRECAUTIONS

In order to guarantee operator safety and correct device functionality, all of the usage limitations and precautions listed below must be respected:

ATTENTION

Make sure that all the safety requirements have been met before using the device. The device must not be powered on or connected to other devices until all of the safety conditions have been met.

ELECTRICAL SAFETY

ATTENTION

All of the control unit's connections are isolated from the grounding system (non-insulated grounding conductor).
DO NOT connect any of these connections to the grounding connector.

In order to guarantee maximum conditions of safety for the operator, it is recommended to follow all of the indications listed in this manual.

- **Only power the device using a mains power supply that complies with the device's specifications (100-240Vac @50/60Hz).**
- **Replace any damaged parts immediately.** Any cables, connectors, accessories or other parts of the device which are damaged or not functioning properly must be replaced immediately. In such cases, contact your nearest authorized technical assistance center.
- **Only use specified accessories and peripherals.** In order to guarantee all of the safety requirements, the device must only be utilized in conjunction with the accessories specified in this manual, which have been tested for use with the device itself. The use of accessories and consumption materials from other manufacturers or not specifically recommended by supplier will not guarantee the safety and correct operation of the equipment. Only use peripherals that comply with the regulations of their specific categories.

SAFETY OF THE OPERATING ENVIRONMENT

The panel of the control unit is resistant to liquids. The device must be protected against drips, sprays and/or immersion and should not be used in environments where such risks are present. Any devices into which liquids may have accidentally penetrated must be immediately shut off, cleaned and inspected by authorized and qualified personnel.

Protection

- IP65

The device must be utilized within the specified environmental temperature, humidity and pressure limits. The instrument is designed to operate under the following environmental conditions:

- Typical use environment: indoor
- Temperature of the working environment: 0°C ÷ +60°C
- Storage and transport temperature: 0°C ÷ +70°C
- Operating relative humidity: up to 95%

ATTENTION

The system must be maintained operational in full compliance with the foreseen safety regulations.

The parameters set on the control unit must comply with the current regulations.

The control unit's malfunction signals must be located in an area that is constantly supervised by the system's maintenance personnel or operators.

Failure to respect even just one of these conditions could cause the control unit's "logic" to operate in <u>a potentially dangerous manner for the users of the service</u>.

In order to avoid any potentially dangerous situations, therefore, the system's service and/or maintenance personnel are advised to work with the utmost care and to signal any alterations in the safety parameters in a timely manner.

As the above issues cannot be monitored by the product in question, the manufacturer shall bear no responsibility for any property damage or personal injury which may result from such malfunctions.

ATTENTION SYMBOL

The symbol illustrated below represents the **ATTENTION** symbol and reminds the operator that he should read the user manual for important information, advice and suggestions regarding the correct and safe use of the equipment.

In particular, when it is positioned close to connection points to cables and peripheries, the symbol in question refers to careful reading of the user manual for instructions related to the nature of such cables and peripheries and the methods for correct and safe connection.

The reproductions of equipment panels, with relative commands, connections, symbols and labels are provided in this chapter. Each attention symbol is accompanied by a detailed explanation of its meaning.

INFORMATION ON RECYCLING AND USE OF MATERIALS

The supplier, in accordance with specific European regulations, aims at constant improvement of development and of production procedures of its equipment with the objective of drastically reducing the negative impact on the environment caused by parts, components, consumption materials, packaging and the equipment itself at the end of its life cycle.

The packages are designed and produced to allow the reuse or recovery, including recycling, of the great part of the materials and to minimize the amount of waste or residues to be disposed. In order to assure a correct environmental impact, the equipment has been designed with the smallest circuit possible, with the lowest differentiation of materials and components, with a selection of substances that guarantee utmost recycling and maximum reuse of the parts and waste disposal free from ecological risks.

The equipment is made in such a way as to guarantee the easy separation or dismantling of the materials containing contaminants in comparison with others, in particular during maintenance operations and the replacement of components.

ATTENTION

The disposal/recycling of packages, consumption materials and of the equipment itself at the end of its life cycle must be carried out in accordance to the standards and regulations currently in force in the country where the equipment is used.

SPECIAL ATTENTION TO CRITICAL COMPONENTS

The instrument is provided with a graphic display, which contains small amounts of toxic materials.

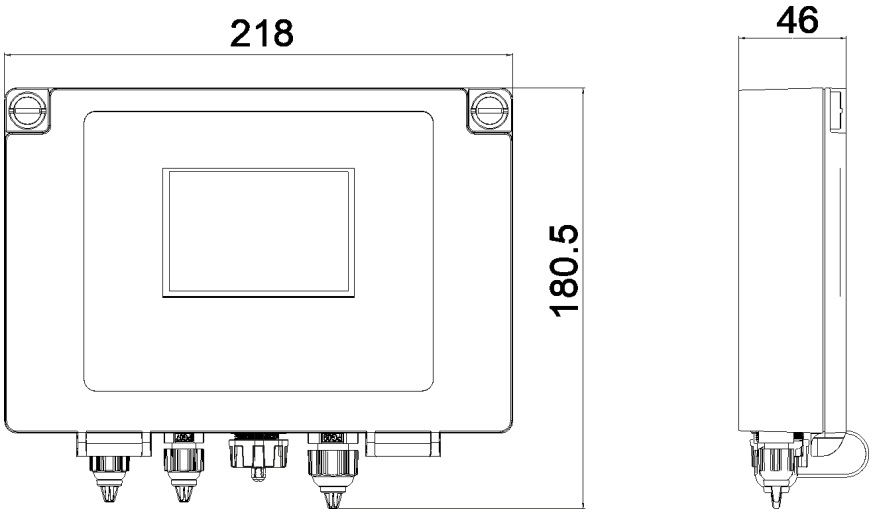
GENERAL DESCRIPTION

The device treated in this manual consists of an Electronic Control Unit and a Technical Manual.

SPECIFICATIONS

Power Supply (version 100-240 VCA)	
Voltage Range	100 – 240Vac 20Watt
Frequency	50/60Hz
Power Supply Fuse	Replaceable fuse protection
Communication Ports	
RS485 Digital Communication Port	RS485 Insulated Modbus Communication protocol
CAN Bus Communication Port	CAN Bus Communication Port
Ethernet connectivity	RJ45 Ethernet port
Wireless Connectivity	Wireless connectivity
Maximum units connected in the Bus network	10
User Interface	
Connection Terminals	Power Supply, RS485 CAN connection (see connection labels)
Keyboard	7 Keys user interface
Display	128x128 monochromatic display
Backlight	Three colors backlight

MECHANICAL DIMENSIONS



Dimensions (L x H x P)	218x180.5x46mm
Material	White (RAL 9003) ABS
Mounting	Wall
Weight	0.8Kg
Front Panel	UV Resistant Polycarbonate

GRAPHIC DISPLAY

The graphic display allows a series of views for the various menus, for programming and for viewing during operation.

CONTROLS, INDICATORS AND CONNECTIONS

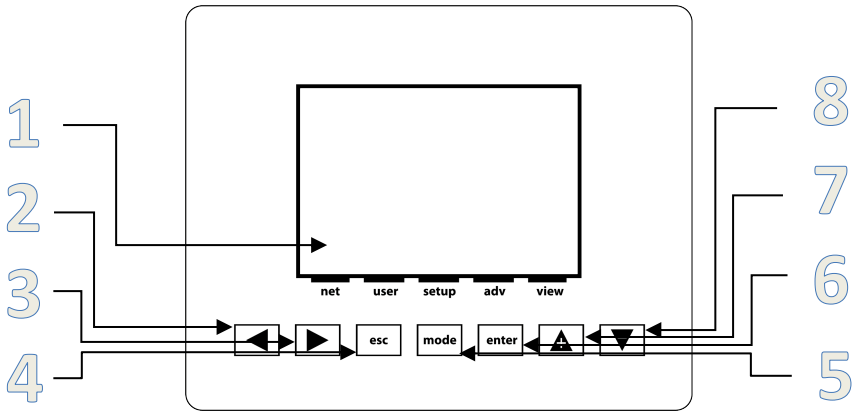


Figure 1 – Instrument interface

1. Graphic Display
2. LEFT key
3. RIGHT key
4. ESC key
5. MODE key
6. ENTER key
7. UP key
8. DOWN key

◀	Used to select a menu or a menu item: **net**, **user**, **setup**, **adv** or **view**. When editing text, it is used to move the cursor to the left.
▶	Used to select a menu or a menu item: **net**, **user**, **setup**, **adv** or **view**. When editing text, it is used to move the cursor to the right.
esc	Used to **exit** the various menu levels. Before definitively exiting the programming phase, you will be asked to save the changes.
mode	Used to select a menu: **net**, **user**, **setup**, **adv** or **view**.
enter	Used to confirm a selection. During programming, it is used to confirm **entry** to the various menu levels and modifications within the same.
▲+	Used to run upwards through the menu or increase the values to be changed.
▼−	Used to run downwards through the menu or decrease the values to be changed.

GRAPHIC DISPLAY SUBDIVISION AREAS IN RUN MODE

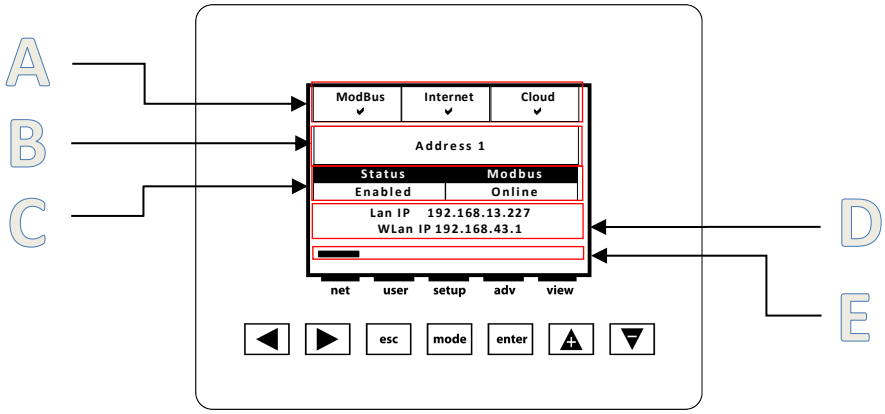


Figure 2 – Graphic Display - Subdivision Areas

In standard view mode, **RUN** mode, the instrument displays the following areas:

A. Text box showing the current **Device**, **Internet** and **Cloud** status
B. Text box showing the information on the device connected to the unit
C. Text box showing **Modbus** status
D. Text box showing the **LAN** and **WLAN** IP
E. Menu name highlight: **NET**, **USER**, **SETUP**, **ADV** or **VIEW**

NOTE

The system's first installation, the Modbus network configuration and the connected devices configuration can only be done by accessing first the local web server and after having connected the device to the Internet.

CONNECTION TO THE POWER SUPPLY

If possible, keep any high-power cables away from the instrument and its connection cable (these could cause inductive disturbances, especially for the analogical part of the system.

Use an alternating 100-240Vac power supply @50/60Hz – or as specified on the plate. The power supply must be as stabilized as possible.

Absolutely avoid connecting the device to rebuilt power supplies, using transformers for example, where the same power supply is also used to power other systems (perhaps of an inductive typology); this could lead to the generation of high voltage spikes which, once emitted, are difficult to block and/or eliminate.

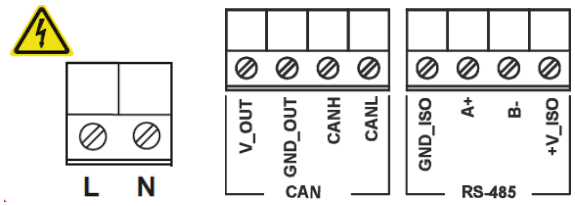
ATTENTION

The electrical line must be equipped with an appropriate circuit breaker, in compliance with the proper installation standards

It is nevertheless always a good idea to check the quality of the grounding connector. In industrial facilities, it is not uncommon to find grounding connectors that cause electrical disturbances instead of preventing them; wherever doubts should arise regarding the quality of the facility's grounding connectors, it is better to connect the control unit's electrical system to a dedicated grounding rod.

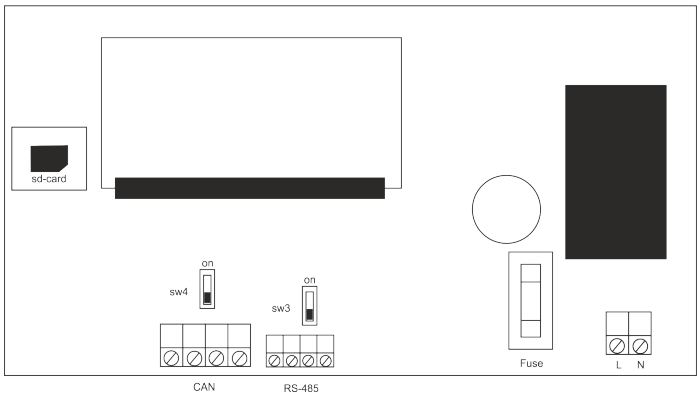
CONNECTION TERMINAL BLOCK

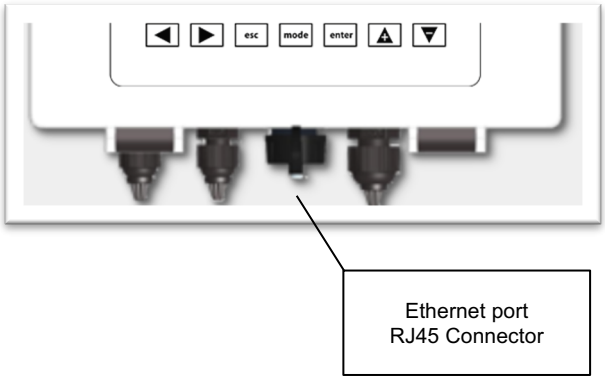
INPUT AND OUTPUT CONNECTORS, POWER AND GROUNDING CONNECTORS



Connector	Description
Power Supply	100-240Vac @50/60Hz
CAN	CAN Communication Port
RS485	Serial Port for Data Communication
Ethernet	Standard RJ45 Ethernet port

Main board

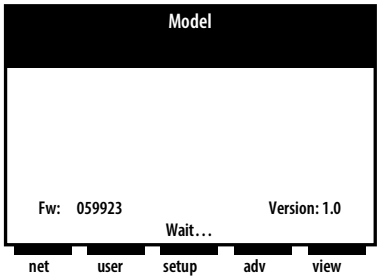




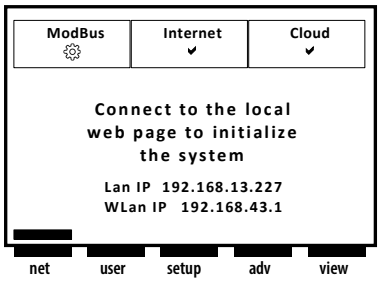
Leave the SWITCHES SW3 or SW4 on the "1" position.
These switches are intended to improve the communication and to reduce noise in installations with very long cables (>50m).
If you have long cables and are facing communication problems, you can try to solve the problem, putting the bus termination only for the first and the last device present on the bus. (i.e. the two devices farther away from each other).

START-UP

At startup, the instrument performs a hardware test of the internal memory and then enters the standard display mode.

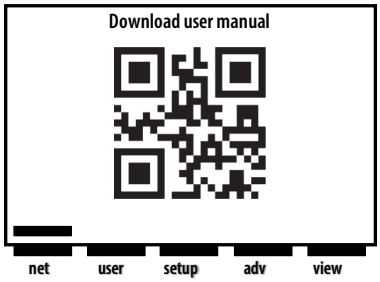


In standard display mode, the system shows the following message: **Connect to the local web page to initialize the system**.
For more information about the system initialization, see the section **WEB APPLICATION USAGE AND DEFAULT VALUES**.



NET MODE

When in **NET** mode, press [esc] for 4 seconds to access the info page and download the user manual by scanning the QR code displayed on the screen. You can also press [enter] for 4 seconds to display the devices ID number by scanning the QR code displayed on the screen.
Press [esc] to return to standard mode.

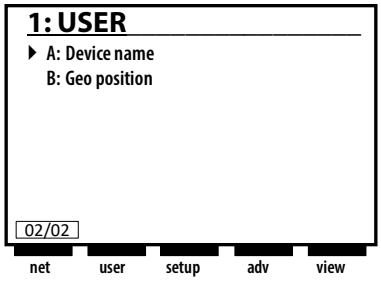


USER MENU (INDEX MENU 1)

The **USER** menu includes the following information:

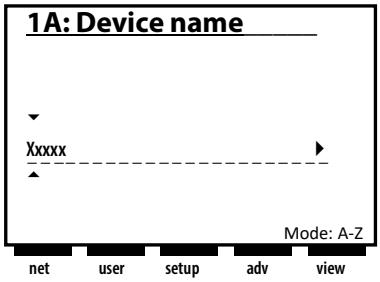
A. **Device name** (Index menu 1A)
B. **Geo position** (Index menu 1B)

From **NET** mode, press [mode] several times to select the **USER** menu then press [enter] to confirm.



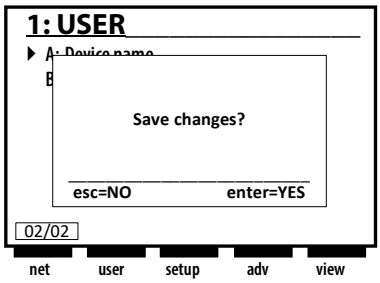
Use [▲] [▼] and [enter] to select the item **1A: Device name**. Press [mode] several times to select the keyboard mode, then use [▲] [▼] and [◀] [▶] to edit the text. When ready, press [enter] to confirm and return to the previous menu.

Use the same procedure to edit the information for all the items in the **USER** menu.



When finished, press [esc] several times to exit the **USER** menu.
You will be prompted to save the changes.

Press [enter] to save or [esc] to discard the modifications.
The system automatically returns to standard mode.

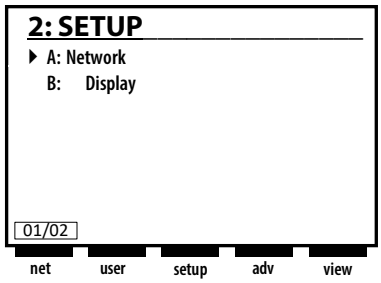


SETUP MENU (INDEX MENU 2)

The **SETUP** menu includes the following items:

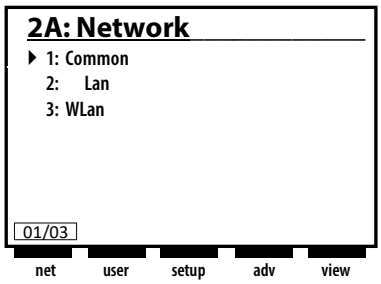
1. **Network** (Index menu 2A)
2. **Display** (Index menu 2B)

From **NET** mode, press [mode] several times to select the **SETUP** menu then press [enter] to confirm.



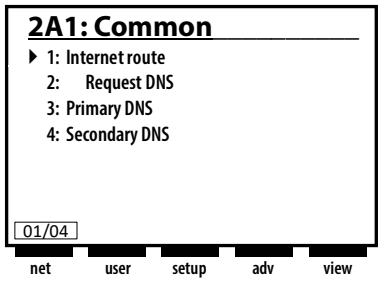
NETWORK (INDEX MENU 2A)

From the **SETUP** menu, use [▲] [▼] and [enter] to select the item **2A: Network**.



To set the network general parameters, use [▲] [▼] and [enter] to select the item **2A1: Common**. In this section you can set the following parameters:

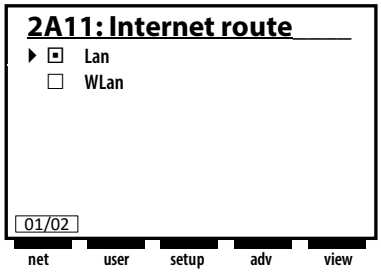
2A11: Internet route
2A12: Request DNS
2A13: Primary DNS
2A14: Secondary DNS



Use [▲] [▼] and [enter] to select the item **2A11: Internet route**.

Use [▲] [▼] to select between **Lan** and **WLan** routing then press [enter] to confirm and return to the previous menu.

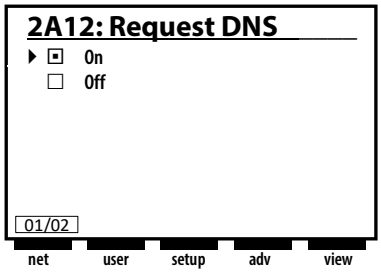
If you don't want to make any changes, press [esc] to return to the previous menu.



Use [▲] [▼] and [enter] to select the item **2A12: Request DNS**.

Use [▲] [▼] to select **ON** or **OFF** then press [enter] to confirm and return to the previous menu.

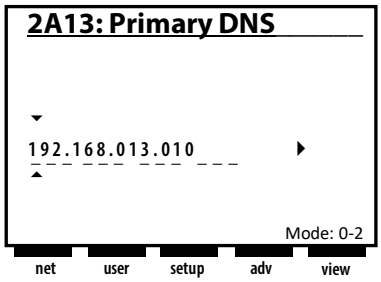
If you don't want to make any changes, press [esc] to return to the previous menu.



Use [▲] [▼] and [enter] to select the item **2A13: Primary DNS**.

Use [▲] [▼] and [◀] [▶] to edit the **primary DNS**. When ready, press [enter] to confirm and return to the previous menu.

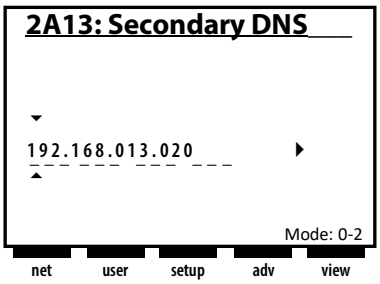
If you don't want to make any changes, press [esc] to return to the previous menu.



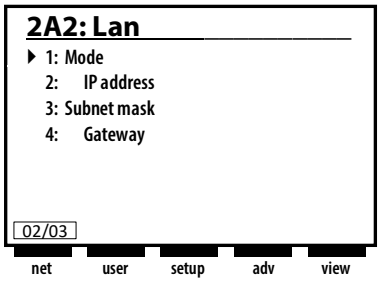
Use ▲ ▼ and enter to select the item **2A14: Secondary DNS**.

Use ▲ ▼ and ◀ ▶ to edit the **secondary DNS**. When ready, press enter to confirm and return to the previous menu.

If you don't want to make any changes, press esc to return to the previous menu.



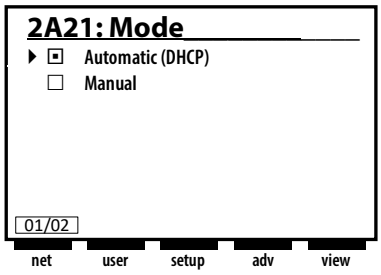
If you set the menu item **2A11: Internet route** to **Lan**, you have to set the **Lan** parameters.
From the **Network** menu, use ▲ ▼ and enter to select the item **2A2: Lan**. In this section you can set the following parameters:
2A21: Mode
2A22: IP address
2A23: Subnet mask
2A24: Gateway



Use ▲ ▼ and enter to select the item **2A21: Mode**.

Use ▲ ▼ to select between **Automatic (DHCP)** and **Manual** then press enter to confirm and return to the previous menu.

If you don't want to make any changes, press esc to return to the previous menu.

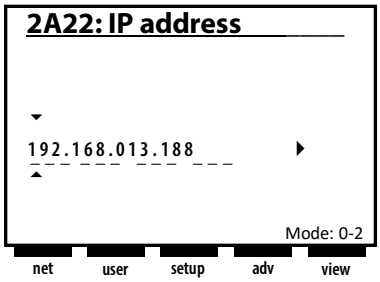


If you set the menu item **2A21: Mode** to **Manual**, subsequently you will have to set the items **2A22: IP address**, **2A23: Subnet mask** and **2A24: Gateway**.

Use ▲ ▼ and enter to select the item **2A22: IP address**.

Use ▲ ▼ and ◀ ▶ to edit the **IP address**. When ready, press enter to confirm and return to the previous menu.

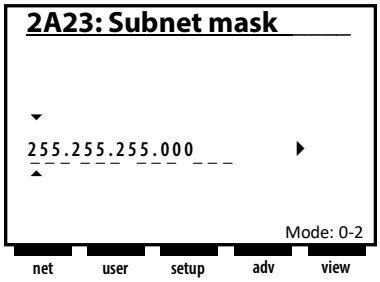
If you don't want to make any changes, press esc to return to the previous menu.



Use ▲ ▼ and enter to select the item **2A23: Subnet mask**.

Use ▲ ▼ and ◀ ▶ to edit the **subnet mask**. When ready, press enter to confirm and return to the previous menu.

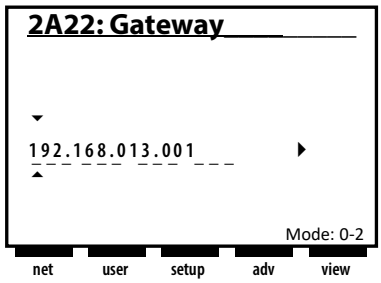
If you don't want to make any changes, press esc to return to the previous menu.



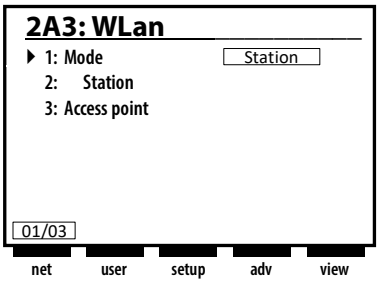
Use ▲ ▼ and enter to select the item **2A24: Gateway**.

Use ▲ ▼ and ◀ ▶ to edit the **gateway**. When ready, press enter to confirm and return to the previous menu.

If you don't want to make any changes, press esc to return to the previous menu.

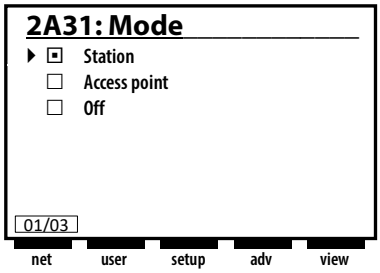


If you set the menu item **2A11: Internet route** to **WLan**, you have to set the **WLan** parameters.



From the **Network** menu, use ▲ ▼ and enter to select the item **2A3: WLan**. In this section you can set the following parameters:
2A31: Mode
2A32: Station
2A33: Access point

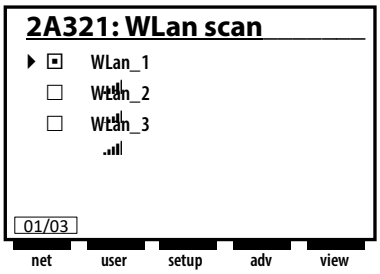
Use ▲ ▼ and enter to select the item **2A31: Mode**.



Use ▲ ▼ to select between **Station** and **Access point**. Select **Off** if you want to turn the **WLan** function off. Press enter to confirm and return to the previous menu.

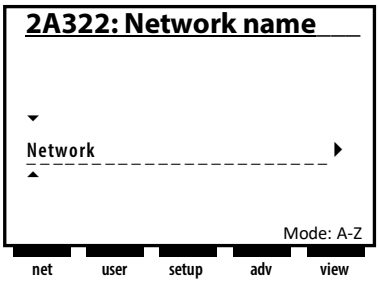
If you don't want to make any changes, press esc to return to the previous menu.

If you set the menu item **2A31: Mode** to **Station**, then use ▲ ▼ and enter to select the item **2A32: Station**.



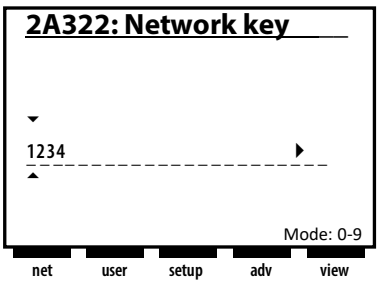
Use ▲ ▼ and enter to select the item **2A321: WLan scan**. From the list of discovered networks, select the one that corresponds to your needs and press enter to confirm.

Use ▲ ▼ and enter to select the item **2A322: Network name**.



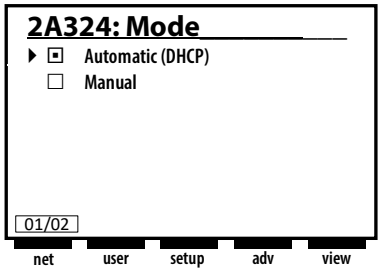
Press mode several times to select the keyboard mode, then use ▲ ▼ and ◀ ▶ to edit the **network name**. When ready, press enter to confirm and return to the previous menu.

Use ▲ ▼ and enter to select the item **2A323: Network key**.



Press mode several times to select the keyboard mode, then use ▲ ▼ and ◀ ▶ to edit the **network key**. When ready, press enter to confirm and return to the previous menu.

Use ▲ ▼ and enter to select the item **2A324: Mode**.



Use ▲ ▼ to select between **Automatic (DHCP)** and **Manual** then press enter to confirm and return to the previous menu.

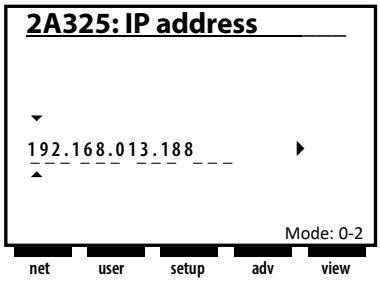
If you don't want to make any changes, press esc to return to the previous menu.

If you set the menu item **2A324: Mode** to **Manual**, subsequently you will have to set the items **2A325: IP address**, **2A326: Subnet mask** and **2A327: Gateway**.

Use ▲ ▼ and enter to select the item **2A325: IP address**.

Use ▲ ▼ and ◀ ▶ to edit the **IP address**. When ready, press enter to confirm and return to the previous menu.

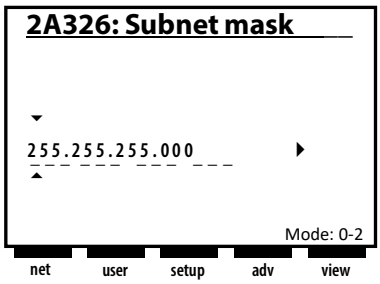
If you don't want to make any changes, press esc to return to the previous menu.



Use ▲ ▼ and enter to select the item **2A326: Subnet mask**.

Use ▲ ▼ and ◀ ▶ to edit the **subnet mask**. When ready, press enter to confirm and return to the previous menu.

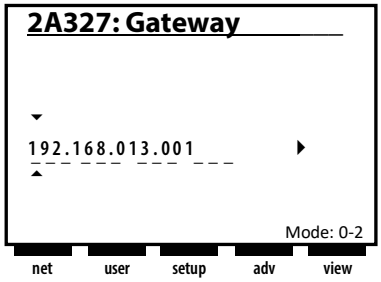
If you don't want to make any changes, press esc to return to the previous menu.



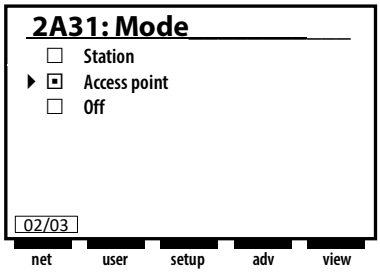
Use ▲ ▼ and enter to select the item **2A327: Gateway**.

Use ▲ ▼ and ◀ ▶ to edit the **gateway**. When ready, press enter to confirm and return to the previous menu.

If you don't want to make any changes, press esc to return to the previous menu.

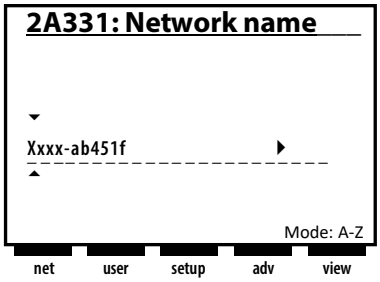


If you set the menu item **2A31: Mode** to **Access point**, then use ▲ ▼ and enter to select the item **2A33: Access point**.



Use ▲ ▼ and enter to select the item **2A331: Network name**.

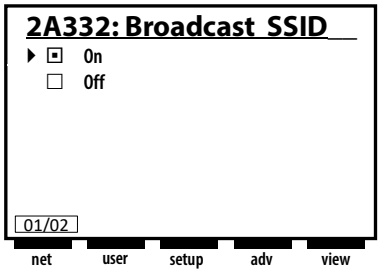
Press mode several times to select the keyboard mode, then use ▲ ▼ and ◀ ▶ to edit the **network name**. When ready, press enter to confirm and return to the previous menu.



Use ▲ ▼ and enter to select the item **2A332: Broadcast SSID**.

Use ▲ ▼ to select between **ON** and **OFF** then press enter to confirm and return to the previous menu.

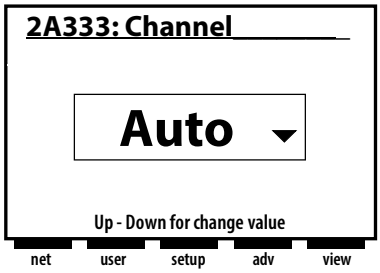
If you don't want to make any changes, press esc to return to the previous menu.



Use ▲ ▼ and enter to select the item **2A333: Channel**.

Use ▲ ▼ to select the **access point channel** then press enter to confirm and return to the previous menu. The default value is **AUTO**.

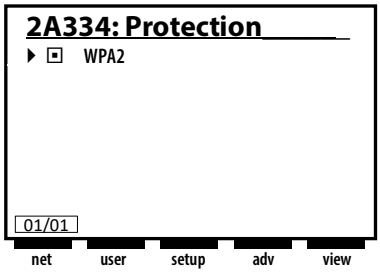
If you don't want to make any changes, press esc to return to the previous menu.



Use ▲ ▼ and enter to select the item **2A334: Protection**.

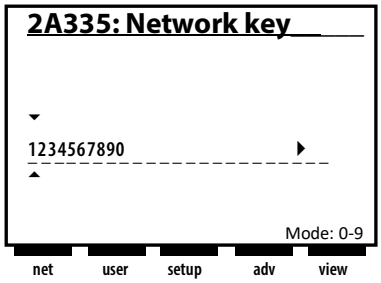
Use ▲ ▼ to select **WPA2** then press enter to confirm and return to the previous menu.

If you don't want to make any changes, press esc to return to the previous menu.

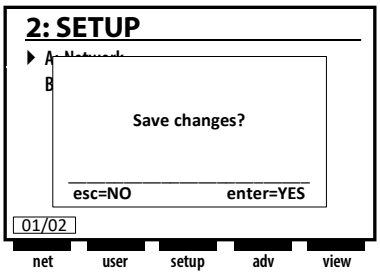


Use ▲ ▼ and enter to select the item **2A335: Network key**.

Press mode several times to select the keyboard mode, then use ▲ ▼ and ◀ ▶ to edit the **network key**. When ready, press enter to confirm and return to the previous menu.

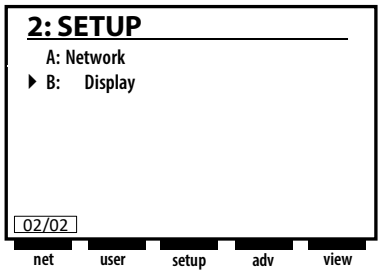


When finished, press esc several times to exit the **SETUP** menu.
You will be prompted to save the changes.
Press enter to save or esc to discard the modifications.
The system automatically returns to standard mode.

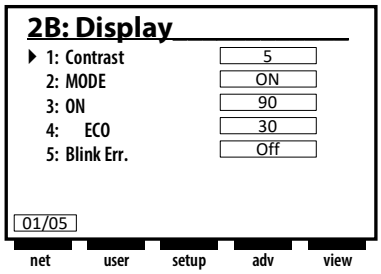


DISPLAY (INDEX MENU 2B)

From the **SETUP** menu, use ▲ ▼ and enter to select the item **2B: Display**.

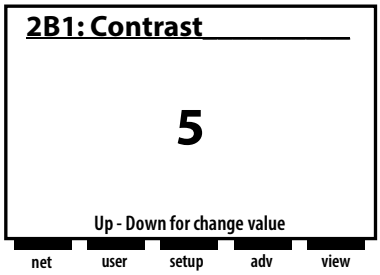


The **Display** setup menu includes the following options:
2B1: Contrast
2B2: Mode
2B3: On
2B4: Eco
2B5: Blink Err.



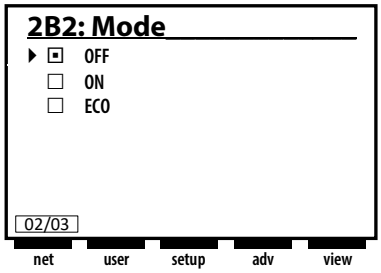
Use ▲ ▼ and enter to select the item **2B1: Contrast**.

Use ▲ ▼ to adjust the contrast to a value between **-15** and **+15** then press enter to confirm.

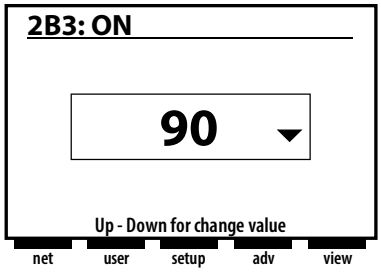


Use ▲ ▼ and enter to select the item **2B2: Mode**.

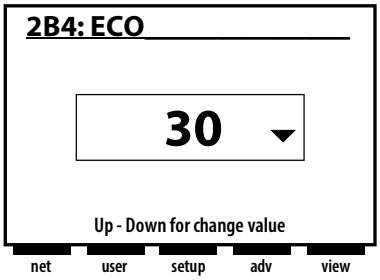
Use ▲ ▼ to set the **backlight mode** to **OFF**, **ON** or **ECO** and press enter to confirm. If you set the **backlight mode** to **OFF**, the display backlight will be permanently turned off.



If you set the item **2B2: Mode** to **ON**, the display backlight will be permanently on at the selected brightness value. The default value is 90%. To change the value, use ▲ ▼ and enter to select the item **2B3: ON**.
Use ▲ ▼ to set the **brightness** to the desired value and press enter to confirm.

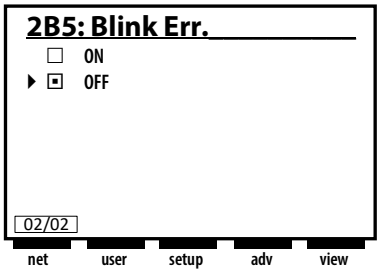


If you set the item **2B2: Mode** to **ECO**, when the system is in use, the display backlight will be at the selected brightness **ON** value (default 90%) and when the system is in standby, the display backlight will be at the selected brightness **ECO** value (default 30%).
Use ▲ ▼ and enter to select the item **2B4: ECO**.
Use ▲ ▼ to set the **brightness ECO** to the desired value and press enter to confirm.

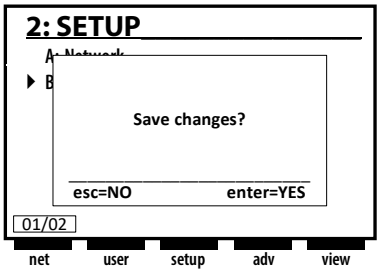


Use ▲ ▼ and enter to select the item **2B5: Blink Err**.

By selecting **ON**, in case of error or alarm the display will turn to red and will start to blink.
Use ▲ ▼ to set the **blinking** option to **ON** or **OFF** and press enter to confirm.



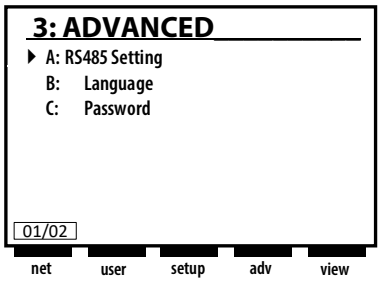
When finished, press esc several times to exit the **SETUP** menu.
You will be prompted to save the changes.
Press enter to save or esc to discard the modifications.
The system automatically returns to standard mode.



ADVANCED SETUP MENU (INDEX MENU 3)

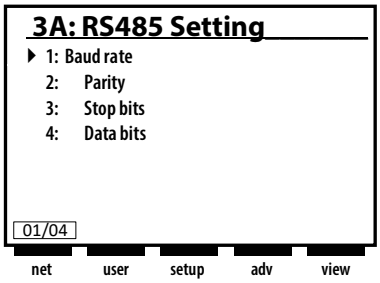
The **ADVANCED SETUP** menu includes the following items:

1. **RS485 setting** (Index menu 3A)
2. **Language** (Index menu 3B)
3. **Password** (Index menu 3C)

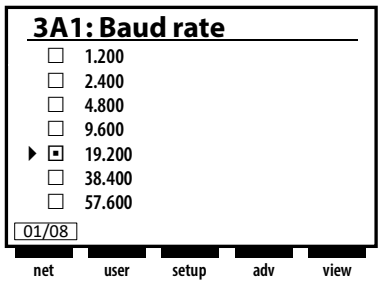


RS485 SETTING (INDEX MENU 3A)

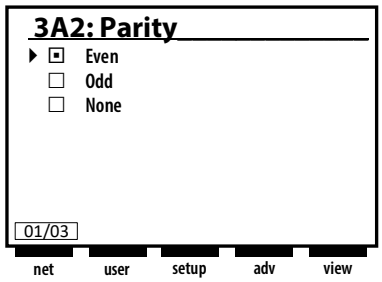
From **NET** mode, press [mode] several times to select the **ADVANCED SETUP** menu, then press [enter] to confirm.
Use [▲] [▼] and [enter] to select the item **3A: RS485 Setting**.



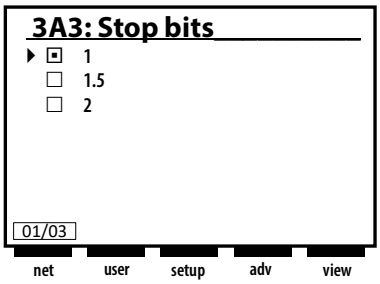
Use [▲] [▼] and [enter] to set the **Baud rate**.



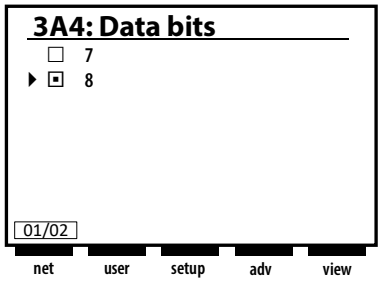
Use [▲] [▼] and [enter] to set the **Parity**.



Use [▲] [▼] and [enter] to set the **Stop bits**.



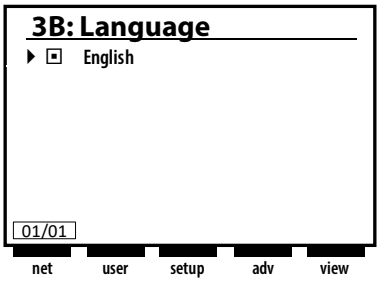
Use [▲] [▼] and [enter] to set the **Data bits**.



Press [esc] to return to the previous menu.
Press [esc] several times to exit the **ADVANCED** menu.
You will be prompted to save the changes.
Press [enter] to save or [esc] to discard the modifications.
The system automatically returns to standard mode.

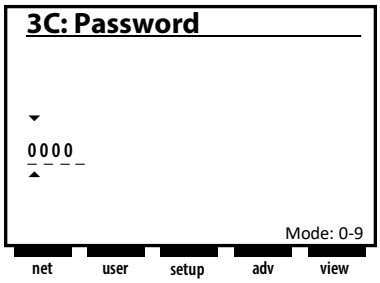
LANGUAGE (INDEX MENU 3B)

From the **ADVANCED** menu, use ▲ ▼ and enter to select the item **3B: Language**.
Use ▲ ▼ and enter to select your language. You can choose between: **English**. The default language is **English**.
Press esc to return to the previous menu.



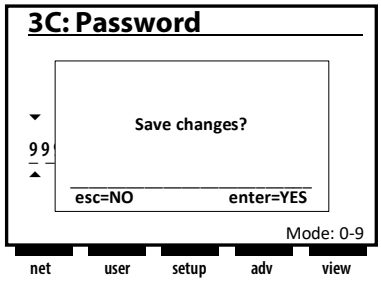
PASSWORD (INDEX MENU 3C)

The password you set in this section is different than the web application password. The default password is **0000**. If you set a password different than **0000**, in order to access the **USER**, **SETUP** or **ADVANCED** menu you will have to insert your password first. By inserting the password, you will have access to the programming menu and view all the set values. The password must be entered only once.
The programming menu remains accessible and the parameters can be edited until you exit the programming menu.



From the **ADVANCED** menu, use ▲ ▼ and enter to select the item **3C: Password**.

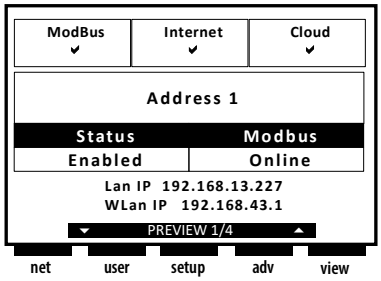
The selected digit will indicate the number than can be modified. Use ▲ ▼ and ◀ ▶ to set the new password. When finished, press enter to confirm.
You will be prompted to save the changes.
Press enter to save or esc to discard the modifications.
By setting **0000** (default), the password is removed.
Press esc to return to the previous menu.



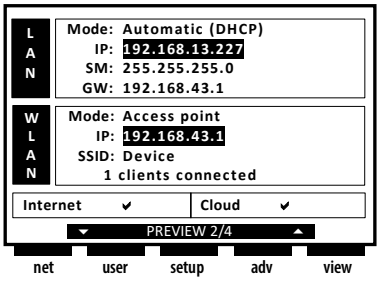
VIEW MENU

From the **NET** mode, press [mode] several times to select the **VIEW** menu and press [enter] to confirm.
The **VIEW** menu consists of 4 views. Scroll through the views by using [▲] [▼]. Press [enter] to select your type of view, then press [esc] return to the **RUN** mode.

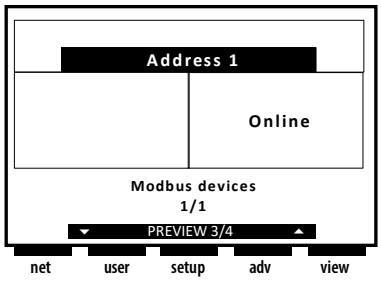
Views Table



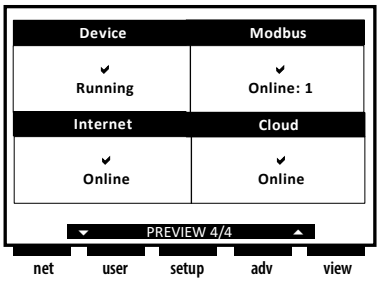
Preview 1



Preview 2



Preview 3



Preview 4

- **Preview 1: General view** (default)
  - ModBus, Internet connection and Cloud connection status
  - Currently polling device and its status
  - Lan IP address
  - Wi-Fi IP address
- **Preview 2: Network view**; oriented to LAN and WLAN connectivity
  - LAN mode, IP address, subnet mask and gateway
  - WLAN mode and details
  - Internet connection and Cloud connection status
- **Preview 3: Modbus view**; oriented to Modbus network
  - Currently polling device and its status
  - Total number of devices in polling on the Modbus network
- **Preview 4: Impact view**; few information displayed in a clear manner
  - Device status
  - Modbus polling status
  - Internet connection status
  - Cloud connection status

The selected type of view will be set as default view in **RUN** mode.

RESET TO DEFAULT PARAMETERS

To reset the device to default parameters, please contact the Technical Office.

WEB APPLICATION USAGE AND DEFAULT VALUES

The system contains a built-in web server located in the system controller. This allows you to program and manage the system through a web browser, which can be done locally on a PC, notebook, tablet or smartphone.

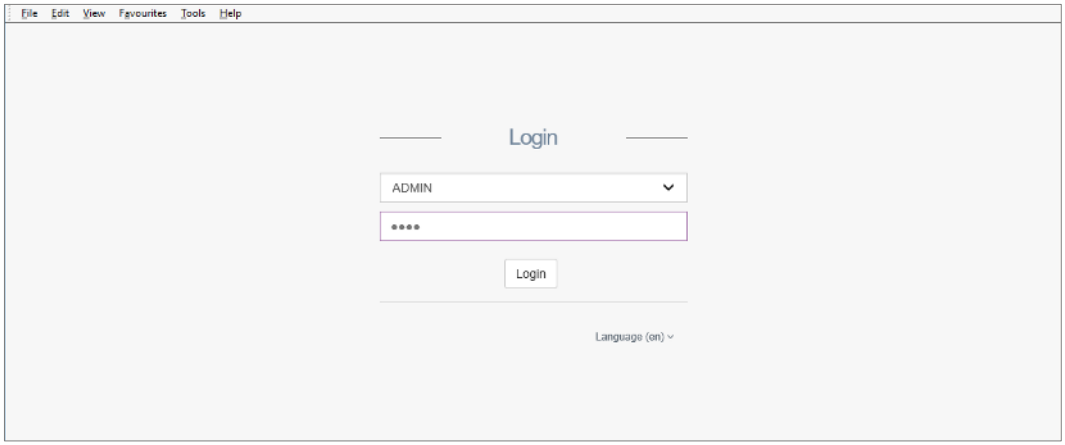
A Web-based application refers to a program that is accessed over a network connection using HTTP rather than existing within a device's memory. A Web-based application runs inside a Web browser.

The application to access the unit requires a device with LAN or Wi-Fi connectivity and a browser capable of displaying web pages. This includes Windows, Android and iOS-based devices.

CONNECTION AND START-UP

The system can be connected to the server either by using a LAN connection or by using a Wi-Fi connection. To connect the system using a Wi-Fi connection, follow the steps below:

- Activate the Wi-Fi connection and connect your device (PC, notebook, smartphone or other) at the local Wi-Fi network of the system (default name **xxxx-abcdef**, where **abcdef** are the last six digits of the system's MAC address). The default Wi-Fi connection password is **1234567890**.
- Open an internet browser on your device and access the following address: **https://192.168.43.1/**
- On the authentication page, select the type of **user**, insert the **password** and press the **Login** button. The factory default password is **0000** (no password).



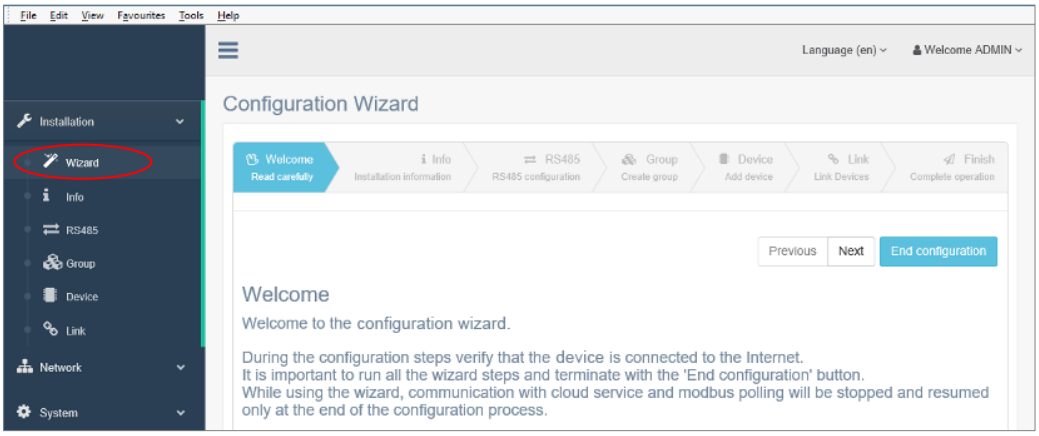
There are three default user profiles:

- **ADMIN**: unlimited access to all the features of the system
- **SERVICE:** limited access
- **END USER:** limited access

The **administrator** is responsible for the administration and maintenance of the entire system. The administrator can also decide which are the privileges of the other two users. For more information, see **User profiling** section on this manual.

INSTALLATION MENU

At the first login as **administrator** or **service**, you will be directed to the system installation page.



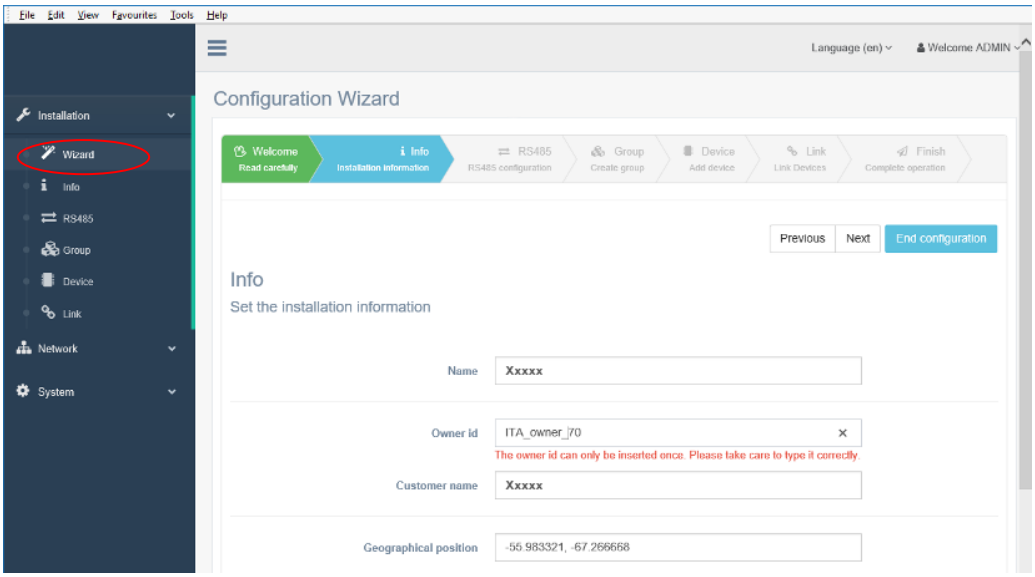
NOTES

Before proceeding with the installation, make sure the Device is connected to the Internet and read carefully the instructions on the configuration Wizard.
It is important to run all the Wizard steps and terminate with the End Configuration button.

When ready, press **Next** to move to the first configuration page.

INFO

The **Info** page displays the system owner's information.



In the form you can fill in the following information:

- **Device name**: name of the new main unit
- **Owner ID**: ID of the devices owner
- **Customer name**: customer's name
- **Geo position**: customer's geographical position

NOTE

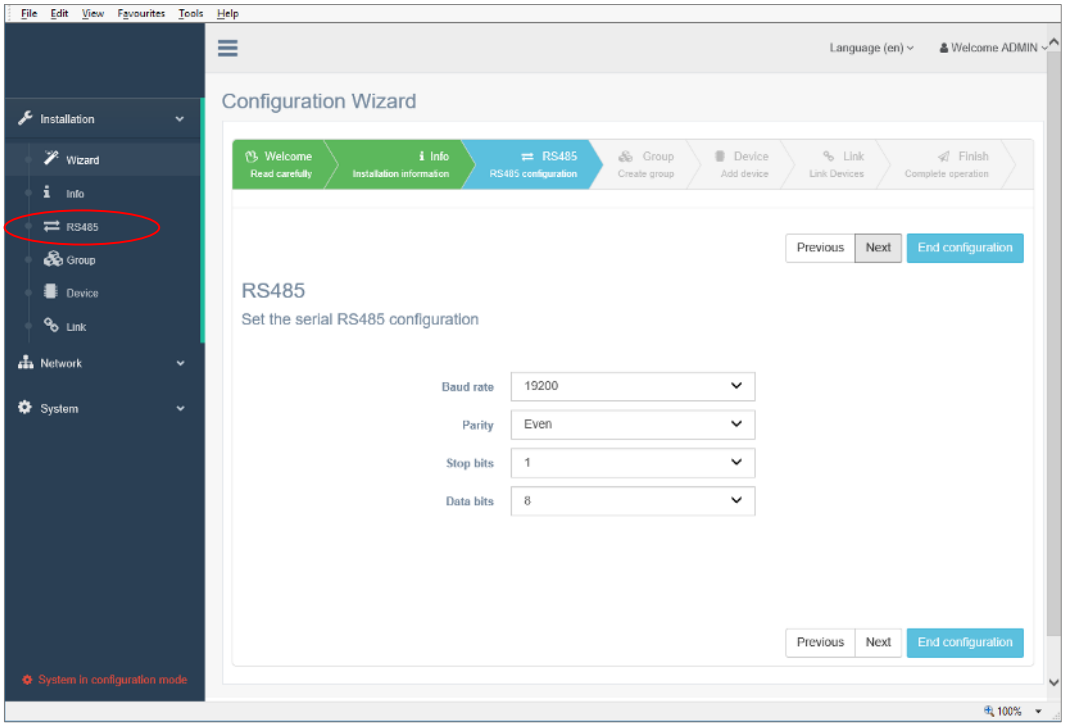
The Owner ID can be inserted only once. It cannot be changed subsequently.

When ready, press **Next** to save the settings and move to the next page.

RS485

This page displays the **RS485** port default parameters:

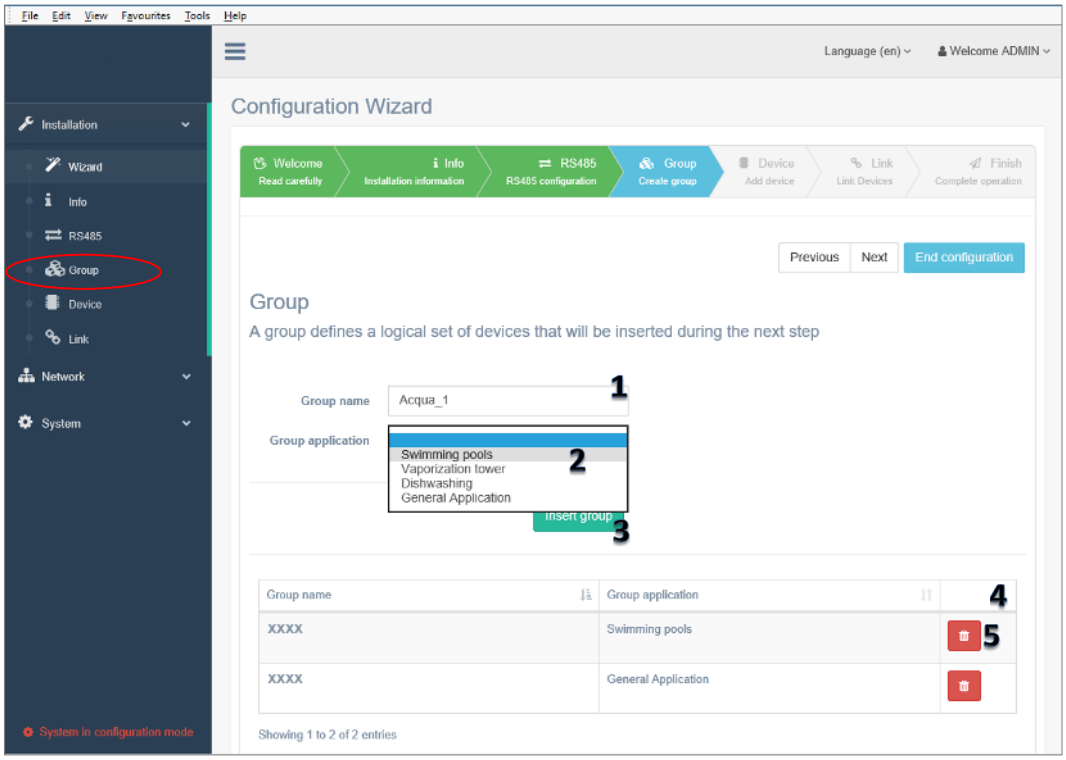
- **Baud rate**: 19200
- **Parity**: Even
- **Stop Bits**: 1
- **Data Bits**: 8



If necessary, modify the parameters and when ready, press **Next** to save the settings and move to the next page.

GROUP

The **Group** page allows you to create groups of devices according to a specific logic.



To create a new group, follow the steps below:

1. Edit the **Group name**
2. Select the **Group application** from the drop-down menu
3. Press the **Insert group** green button
4. The new group will be added to the group list. You can order the groups in the list according to the **Group name** or the **Group application**.
5. You can delete a group from the list at any time by clicking the **Delete group** red button.

When ready, press **Next** to save the settings and move to the next page.

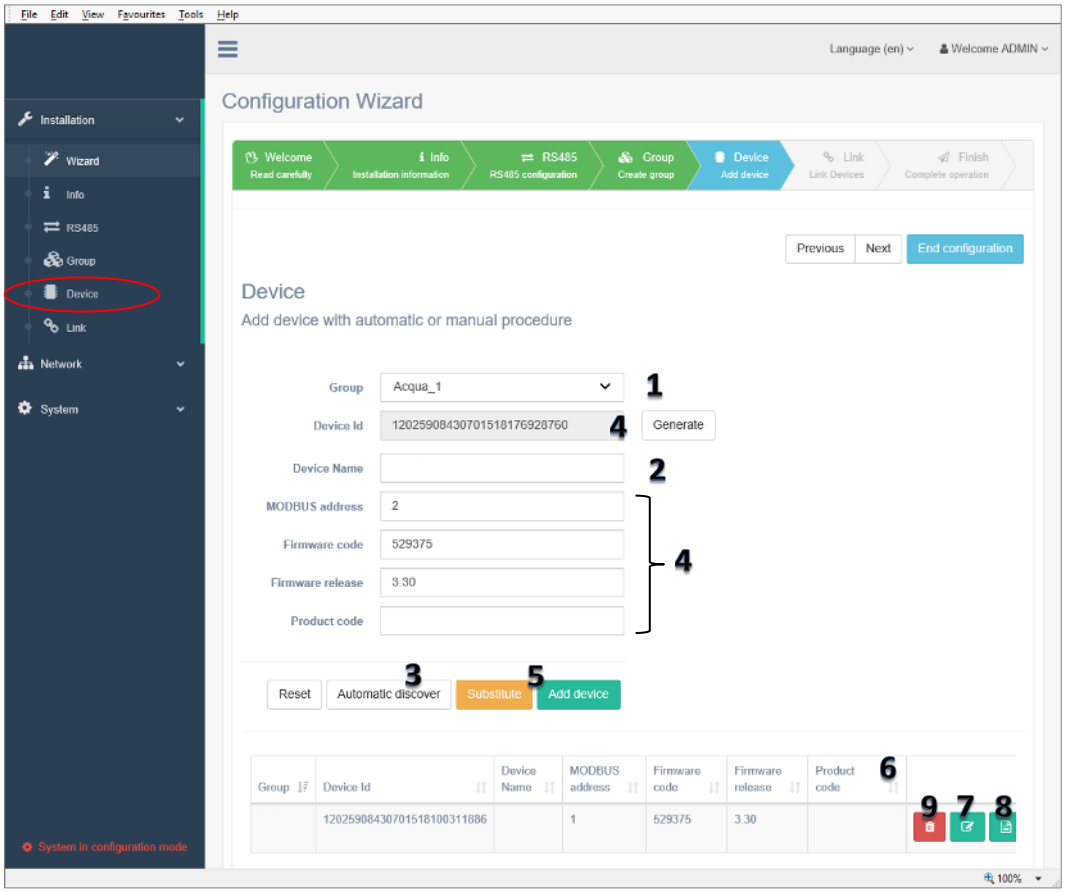
DEVICE

The **Device** page allows you to add different devices to the Modbus network. To add a device, you have to create at least one group in the previous step. The devices can be added to the network using one of the two different procedures:

- the **automatic** procedure
- the **manual** procedure

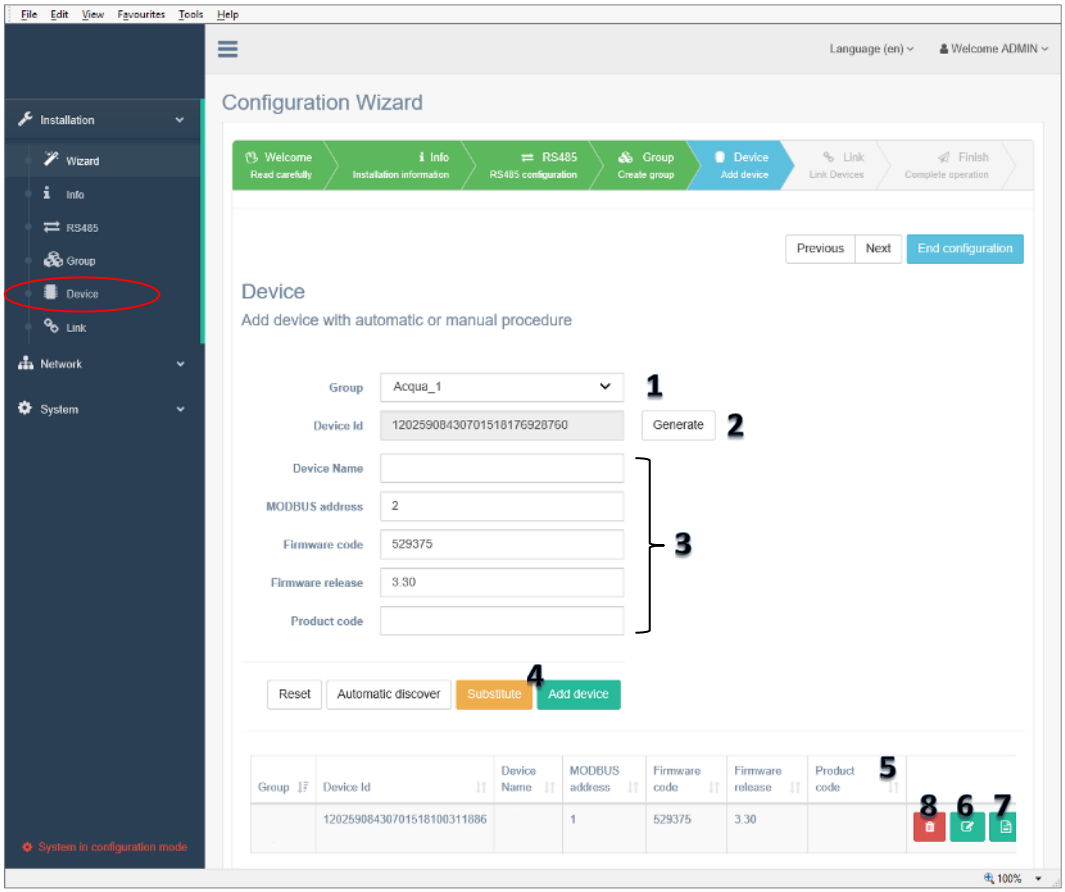
To add a device by using the **automatic procedure**, follow the steps below:

1. Select the **Group** where you want to add the device
2. Edit the **Device name**
3. Make sure the device you want to add has the DOA function enabled. **You should enable the DOA function to one device at a time.** Click the **Automatic discover** button
4. The **Device ID**, **Modbus address**, **Firmware code**, **Firmware release** and **Product code** will be automatically added to the form
5. Click the green **Add device** button to add the new device to your network; alternatively, you can click the yellow **Substitute** button to replace an existing device with the one you are adding
6. The new device will be added to your **device list**
7. Click the **Modify device** green button if you want to modify the device name and group
8. You can customize the text on inputs and outputs of a specific device by clicking the **Edit device free text** button; the changes you make will take effect on the cloud application
9. You can delete a device from the system at any time by clicking the **Delete device** red button



To add a device by using the **manual procedure**, follow the steps below:

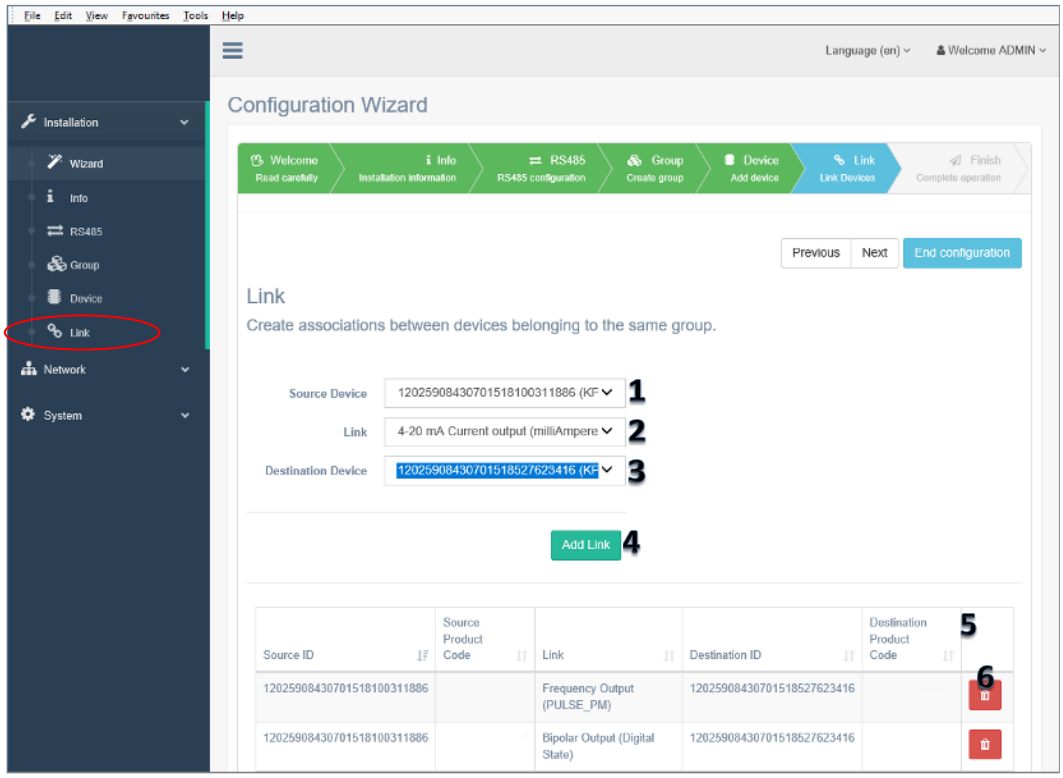
1. Select the **Group** where you want to add the device
2. Click the **Generate** button to generate the **Device ID**
3. Edit the **Device name**, **Modbus address**, **Firmware code**, **Firmware release** and **Product code** of your device
4. Click the green **Add device** button to add the new device to your network; alternatively, you can click the yellow **Substitute** button to replace an existing device with the one you are adding
5. The new device will be added to your **device list**
6. Click the **Modify device** green button if you want to modify the device name and group
7. You can customize the text on inputs and outputs of a specific device by clicking the **Edit device free text** button; the changes you make will take effect on the cloud application
8. You can delete a device from the system at any time by clicking the **Delete device** red button



When adding a new device, if necessary, you can click the **Reset** button to clear the form before adding the new information. You can add only one device at a time.
When ready, press **Next** to save the settings and move to the next page.

LINK

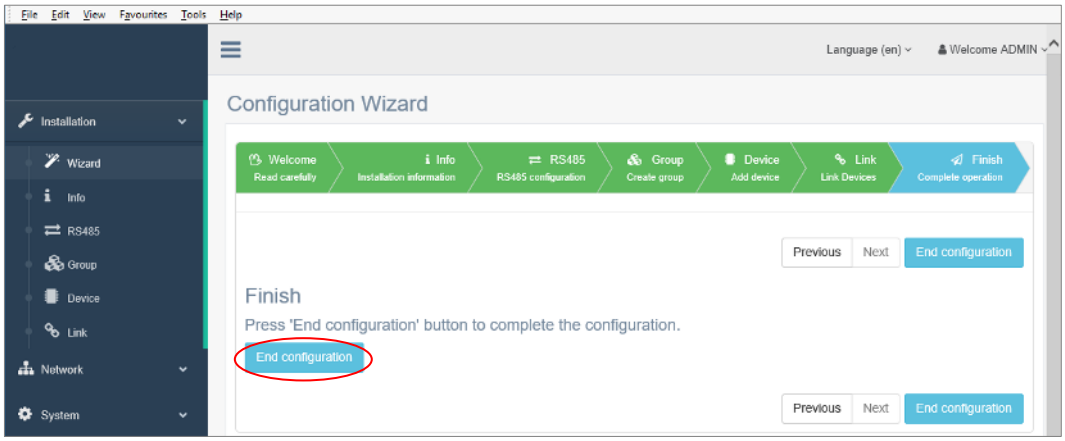
The **Link** page allows you to create associations between different devices belonging to the same group.



To link two devices, follow the steps below:

1. Select the **Source device** from the drop-down menu
2. Select the **Link** from the drop-down menu
3. Select the **Destination device** from the drop-down menu
4. Click the green **Add link** button
5. The new link will be added to your **Links list**
6. You can delete a link from the system at any time by clicking the **Delete link** red button.

When ready, press **Next** to save the settings and move to the next page.



To complete the configuration wizard, press the **End configuration** button.

NOTE

All the Wizard's parameters can be accessed individually, under the Installation menu, whenever necessary.

NETWORK MENU

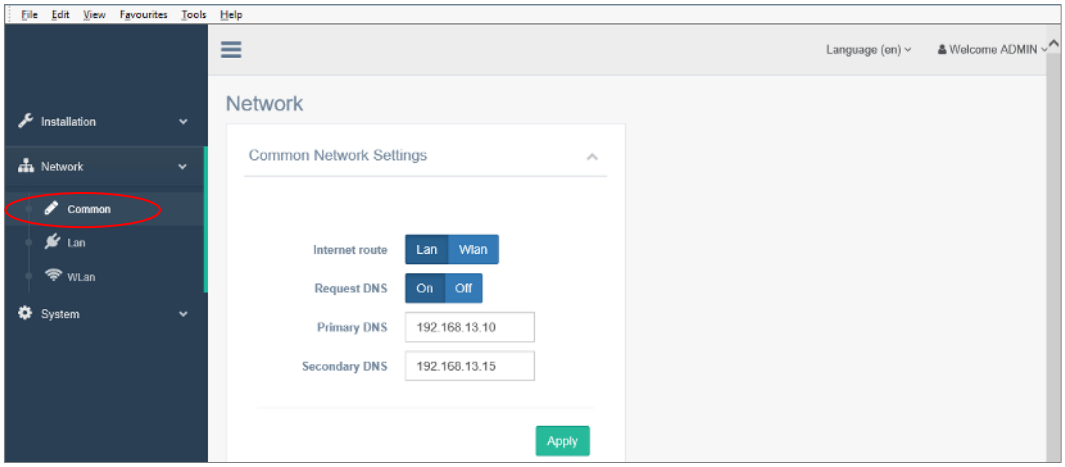
Use the **Network** page to configure the network **Common**, **Lan** or **WLan** parameters.

COMMON

This page allows you to set the network **common** parameters:

- **Internet route:**
  - **Lan**: see **Network > Lan** section for configuration
  - **WLan**: see **Network > WLan** section for configuration
- **Request DNS**: select between **On** and **Off**
- **Primary DNS**: the primary DNS should be of type 192.168.13.10
- **Secondary DNS**: the secondary DNS should be of type 192.168.13.15

If you set the **Network > Common > Request DNS** to **Off**, subsequently you will have to edit the **Primary** and **Secondary DNS**.

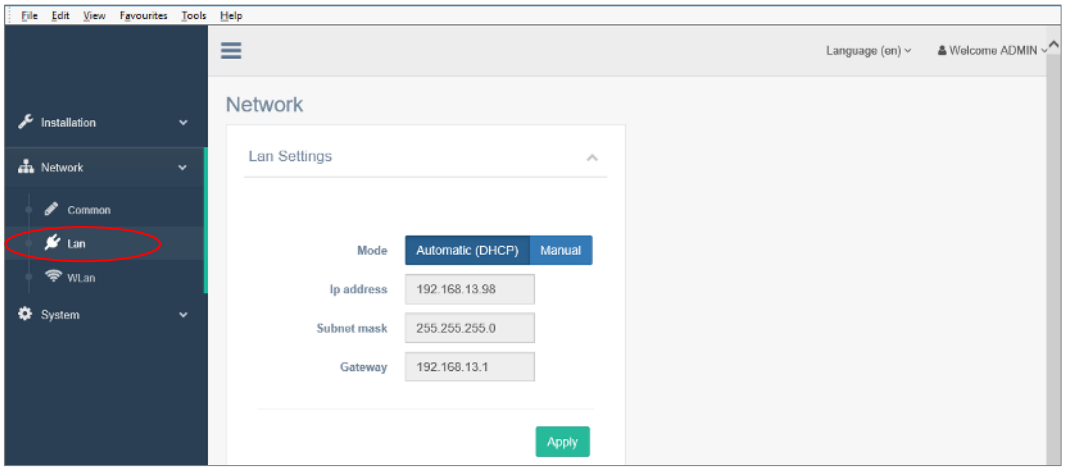


Press **Apply** to save the settings before switching to another page.

LAN

If you set the **Network > Common > Internet route** to **Lan**, you have to set the **Lan** parameters subsequently:

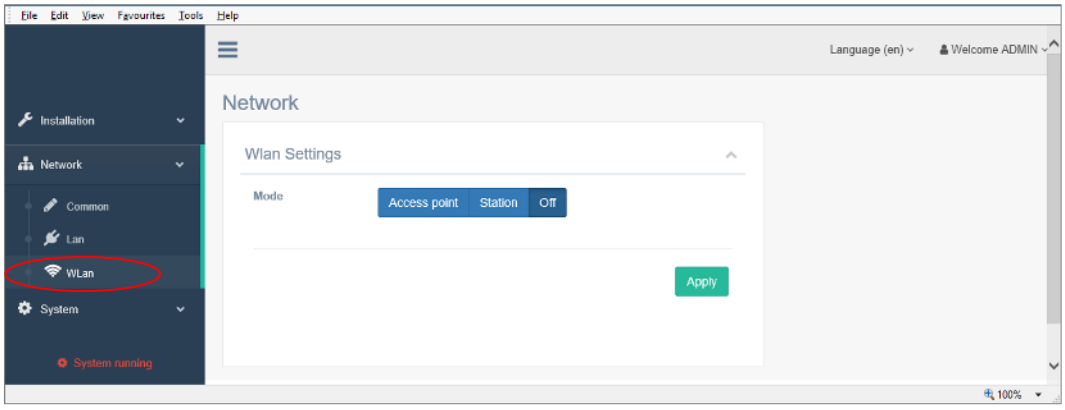
- Click the **Automatic (DHCP)** button to set the **Lan** parameters automatically. In this case the **IP address**, **Subnet mask** and **Gateway** will be automatically assigned.
- Click the **Manual** button to set the **Lan** parameters manually. In this case you have to edit the correct **IP address**, **Subnet mask** and **Gateway**.



Press **Apply** to save the settings before switching to another page.

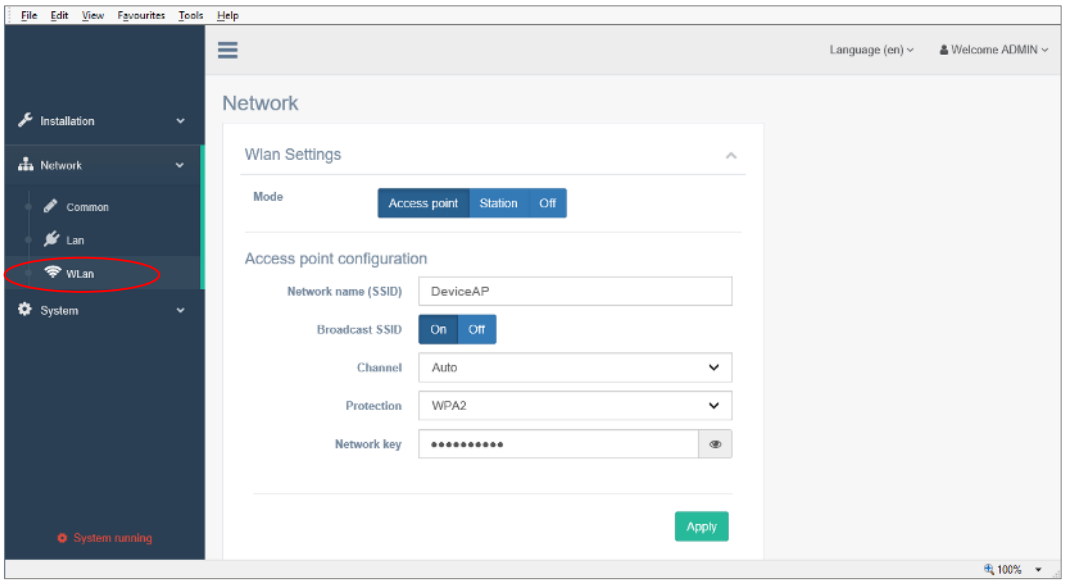
WLAN

This page allows you to set the system **WLan** parameters.
Click the **Off** button and then **Apply** if you want to disable the **WLan** network.



If you set the **Network > Common > Internet route** to **WLan**, you have to set the **WLan** parameters subsequently.
To set the **WLan** network as **Access point**, follow the steps below:

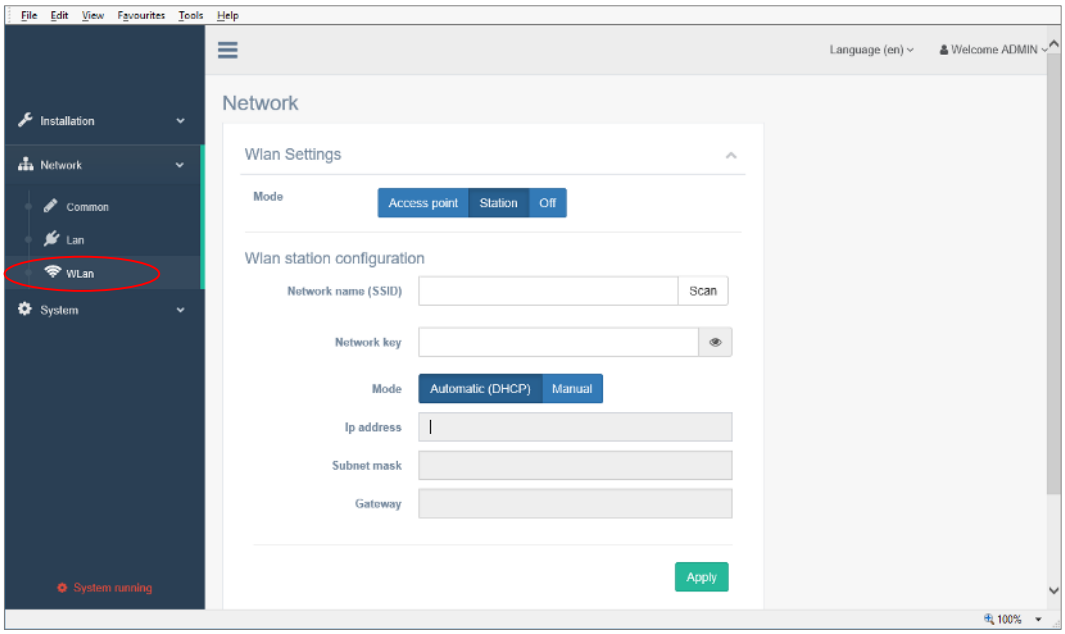
- Click the **Access point** button
- Configure the **Access point** settings:
  - **Network name (SSID)**
  - **Channel**
  - **Protection**
  - **Network key**



Press **Apply** to save the settings before switching to another page.

To set the **WLan** network as **Station**, follow the steps below:

- Click the **Station** button
- Configure the **Station** settings:
  - **Network name (SSID)**: press the **Scan** button then select one of the discovered networks
  - **Network key**: edit the correct network key
- Select the **WLan station mode**:
  - Click the **Automatic (DHCP)** button to set this parameter automatically. In this case the **IP address**, **Subnet mask** and **Gateway** will be automatically assigned.
  - Click the **Manual** button to set this parameter manually. In this case you have to edit the correct **IP address**, **Subnet mask** and **Gateway**.



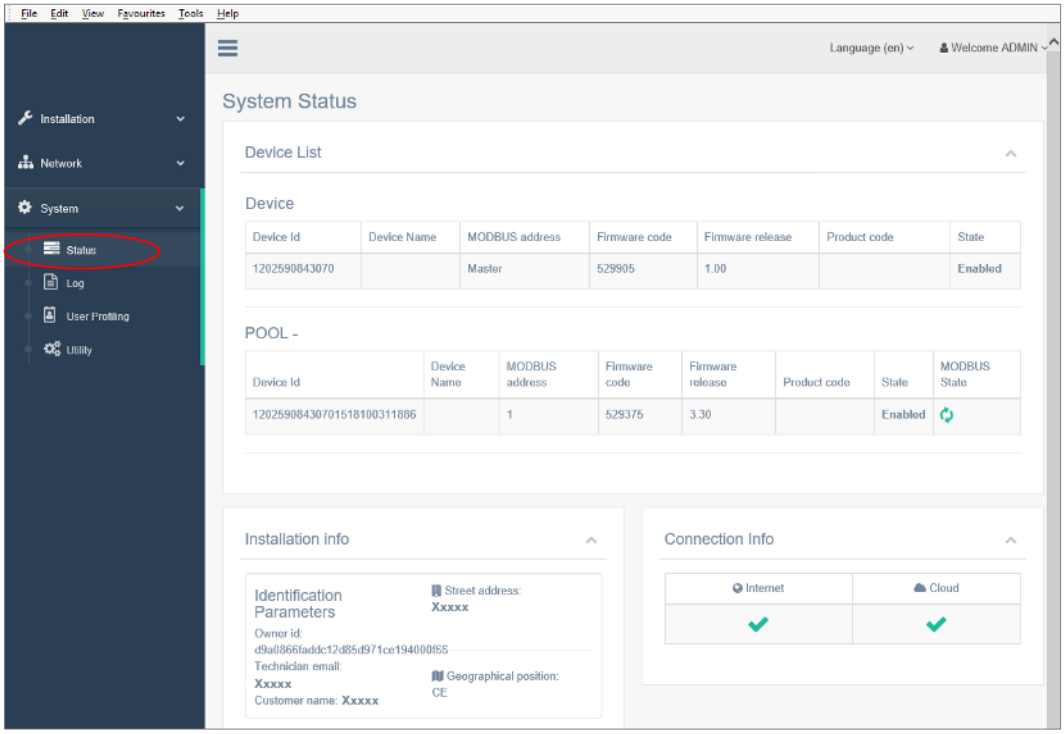
Press **Apply** to save the settings before switching to another page.

SYSTEM MENU

The **System** menu includes the **Status** page, **Log** page, **User profiling** page and **Utility** page.

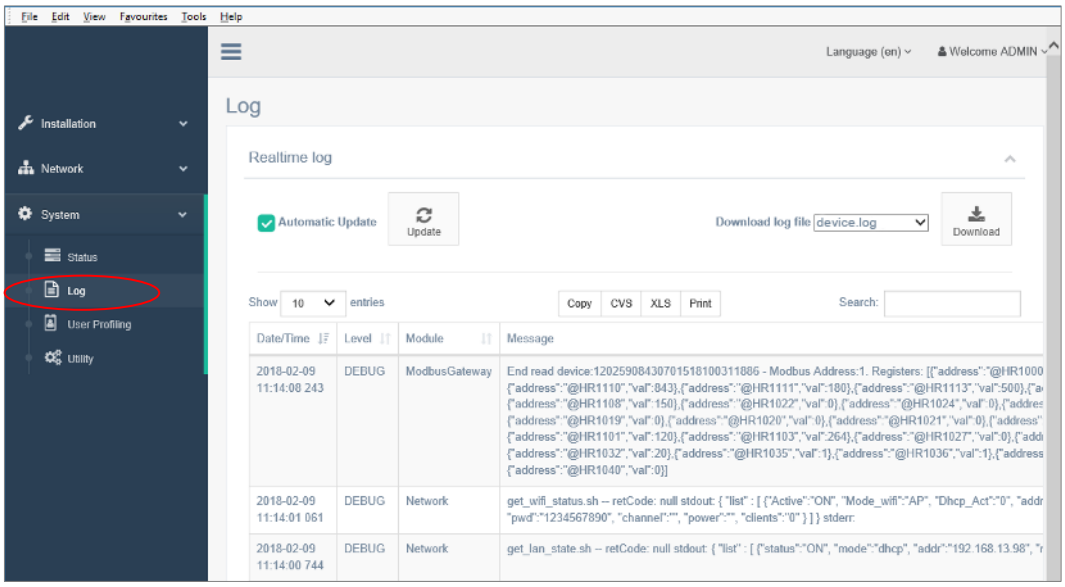
STATUS

The **Status** page displays an overview of the real-time status of the system



LOG

The **Log** page displays the system **real-time log**.

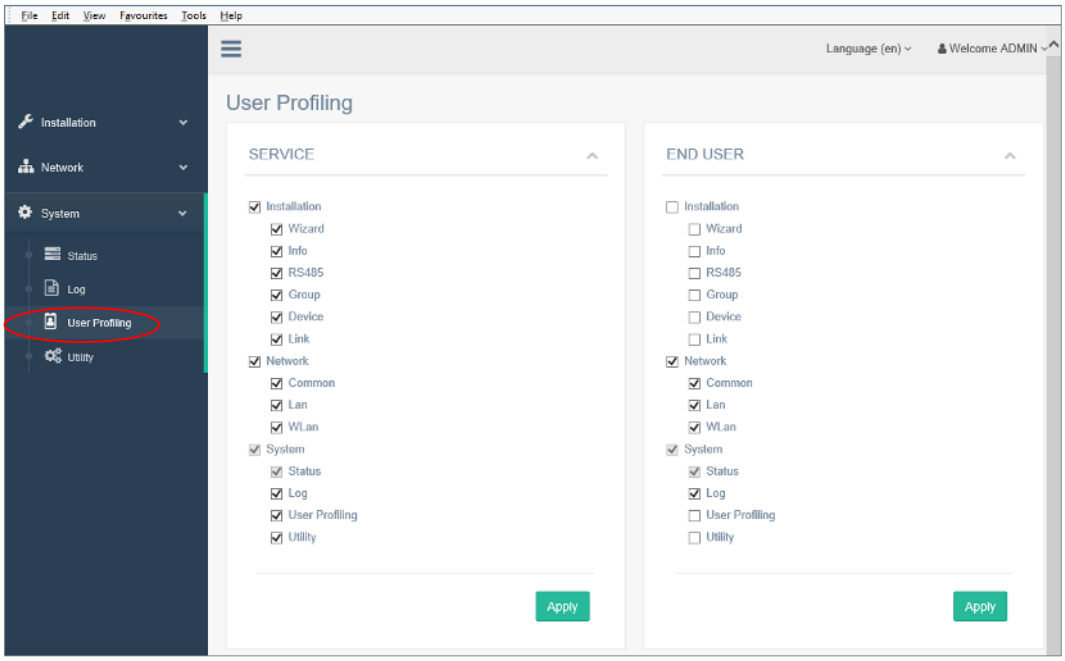


From the **Log** page, you can:

- **download** the log file by clicking the **Download** button
- **copy** the log information to **Clipboard**
- **export** the log information as ***.cvs** or ***.xls** file
- **print** the log information to a **normal** or a **virtual printer**

USER PROFILING

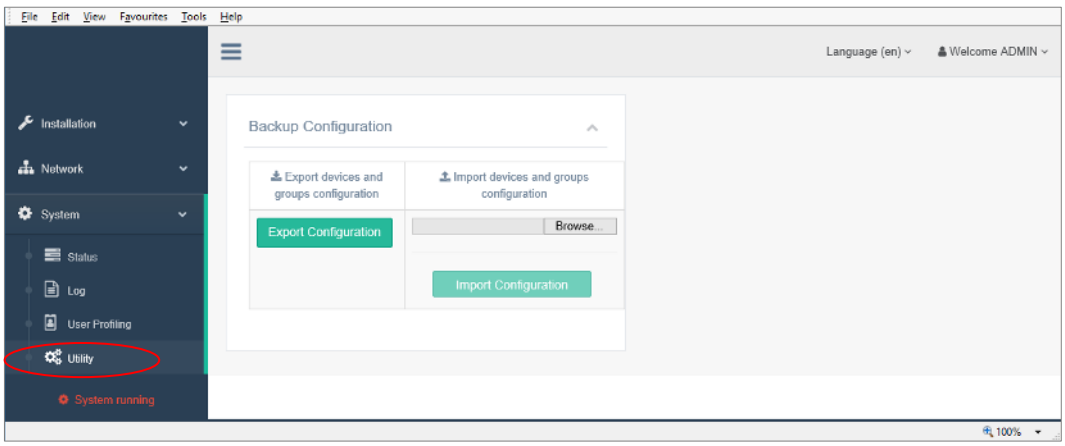
The **User profiling** page allows the system administrator to give privileges to the other two default users.



Press **Apply** to save the settings before switching to another page.

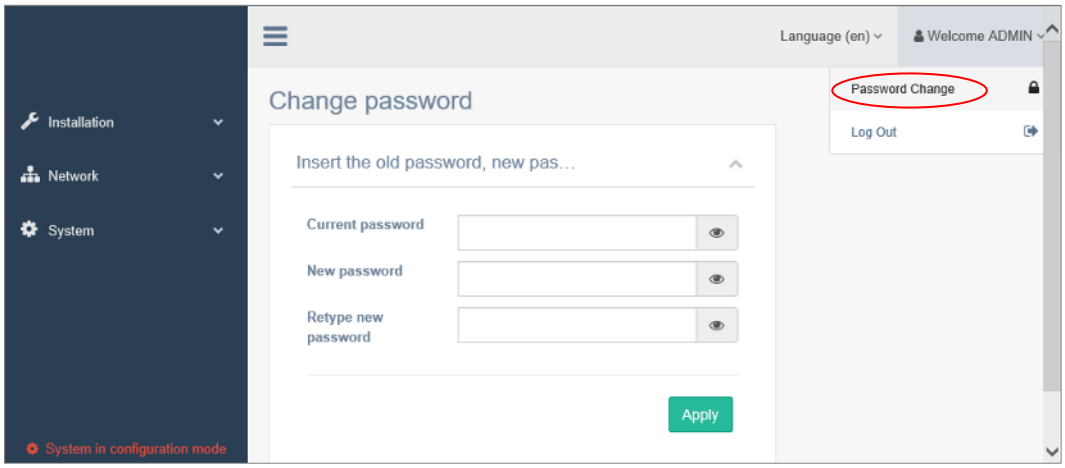
UTILITY

The **Utility** page allows the user to export the system configuration into a configuration file - ***.kcf**.
If necessary, the administrator can import the configuration file to restore the system to a previous state.



PASSWORD

On this page you can set or change the **web authentication password**. The password you set in this section is different than the password you set on the devices main unit.



To change the password, click **Welcome ADMIN** on the upper right side of the page and select **Password Change**.
Follow the instructions to set the new password.
Press **Apply** to save the settings before switching to another page.

WEB APPLICATION LOGOUT

When finished, press the **Log Out** button on the upper right side of the page.

ANNEX: NETWORK CONNECTION GLOSSARY

Term	Definition
IP	**Internet Protocol**. Protocol that allows users to communicate with partners in other networks.
DHCP	**Dynamic Host Configuration Protocol**. Dynamic, temporary assignment of IP addresses from an address pool. DHCP is used to automatically configure TCP/IP networks. The configuration does therefore not require any manual modifications and is carried out centrally and thus consistently. The system administrator defines how the IP addresses are to be assigned and specifies the period of assignment.
DNS	**Domain Name Service**. Network stations on the Internet are accessed via numerical IP addresses. However, as names can be better remembered than numbers, the DNS system was introduced. When a domain name is entered by the user, the TCP/IP stack queries the next DNS server for the associated IP address. The DNS server manages a list in which the IP addresses of the network or the domain are assigned to the respective host names.
***	***