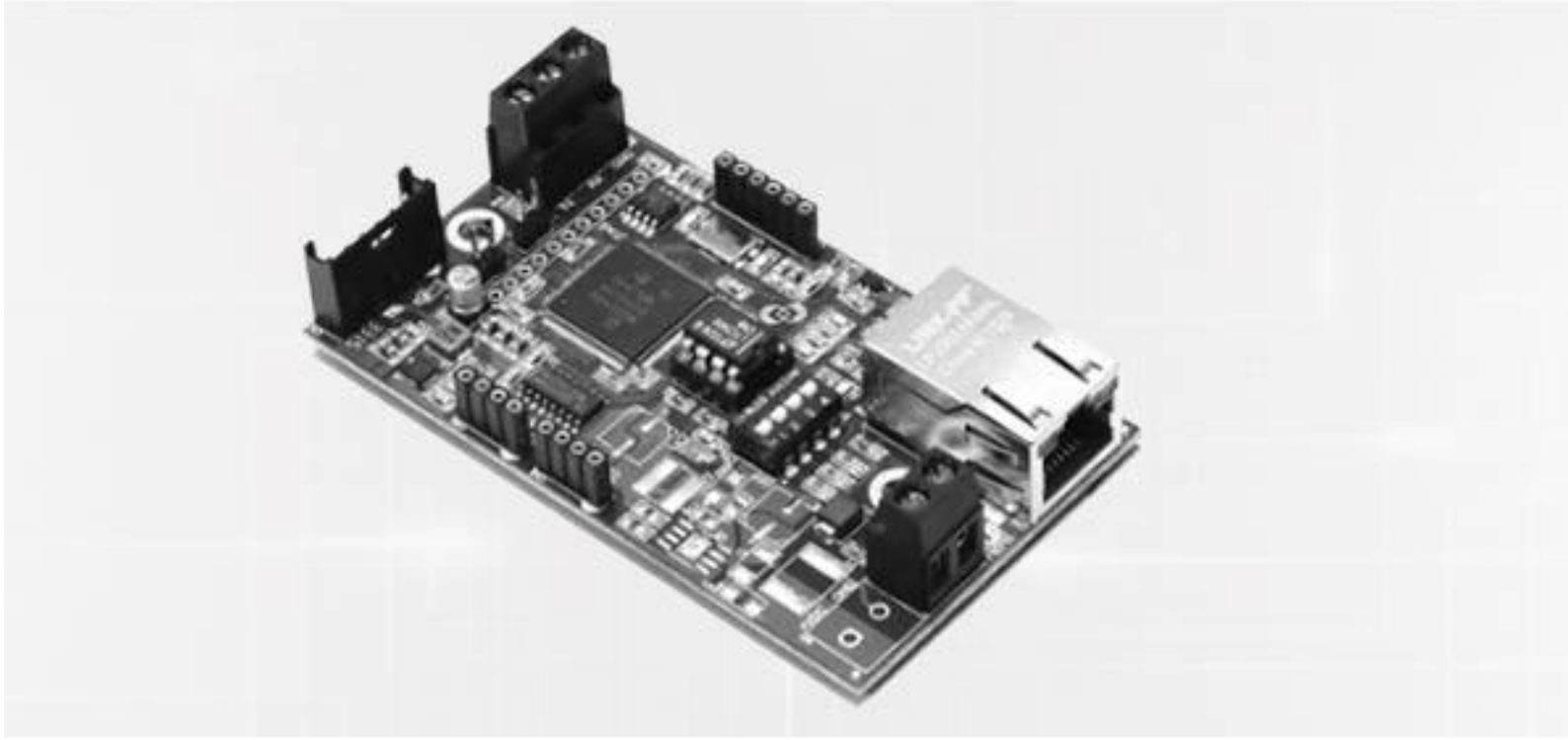
ETHERNET · WIFI

Operative manual - 03.00



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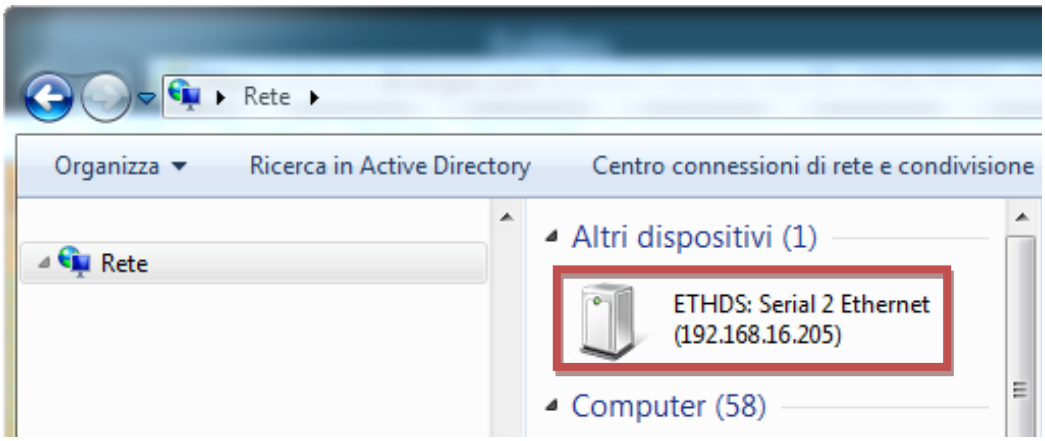
1 Access to the configuration page

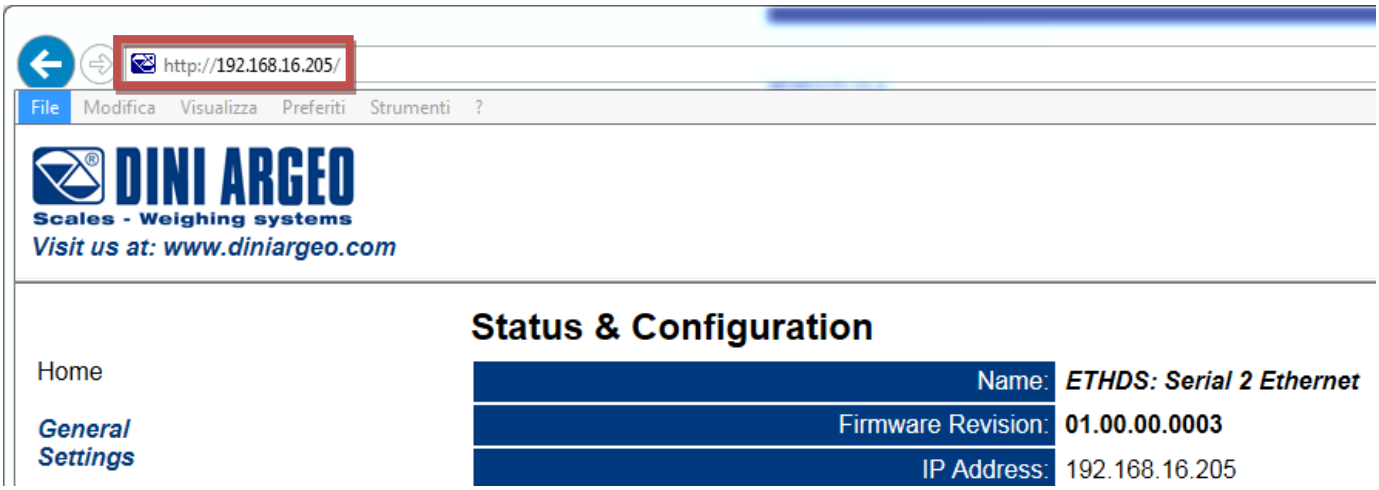
The installation of the module must be performed by a qualified networks expert.

The default IP address of the Ethernet module is **192.168.16.205**

If the network card of your PC is correctly configured, the window “network” will display this:



Or on the IP address **192.168.16.205** through browser

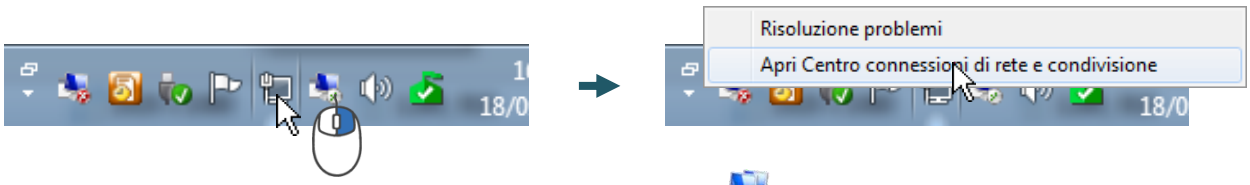


THE ACCESS ON THE CONFIGURATION PAGE IS ALLOWED **ONLY WITH A DIRECT CONNECTION ON THE ETHERNET PORT**

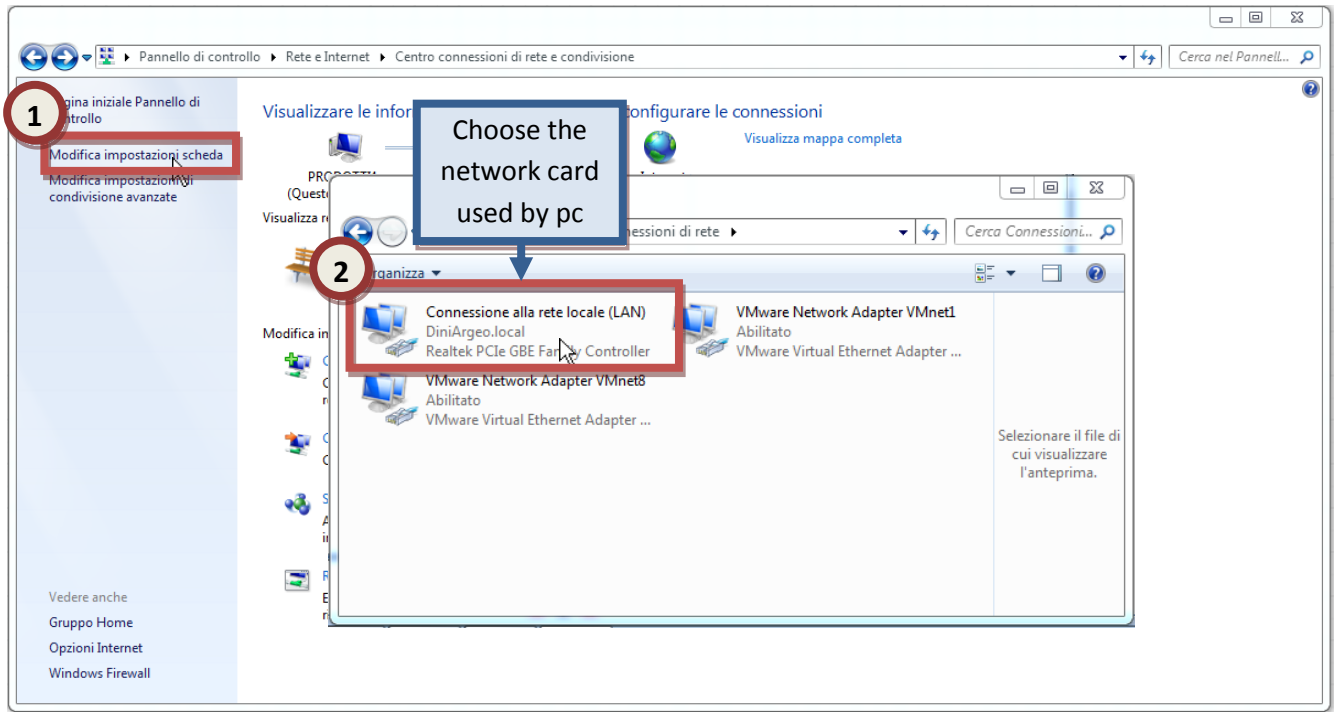
If the module is out of reach, it is necessary to configure the network card of the PC, at the IP address: **192.168.16.xxx**, where **xxx** is an free IP, **different from 205.**

To modify your IP address follow this procedure:

1. Go on Networks connection center and click with the right button of your mouse on

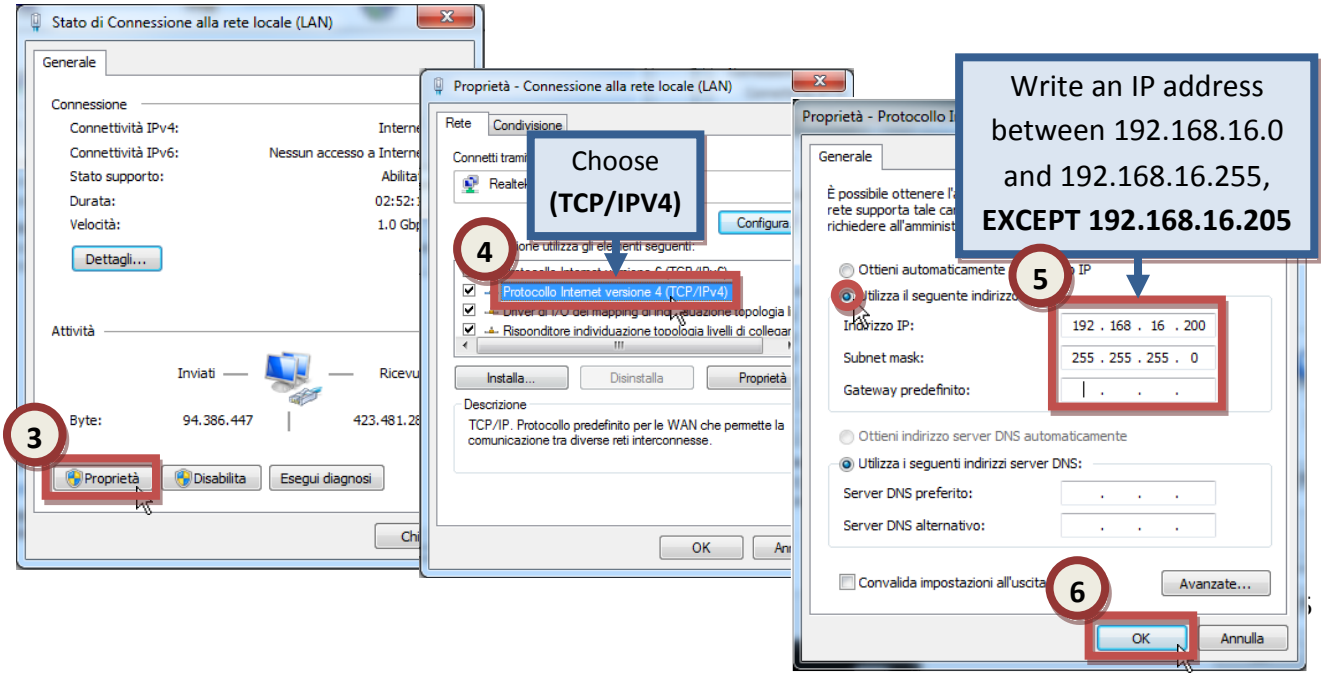


2. Modify the network card configuration and choose the **Network card used by pc**



On the pop-up window choose:

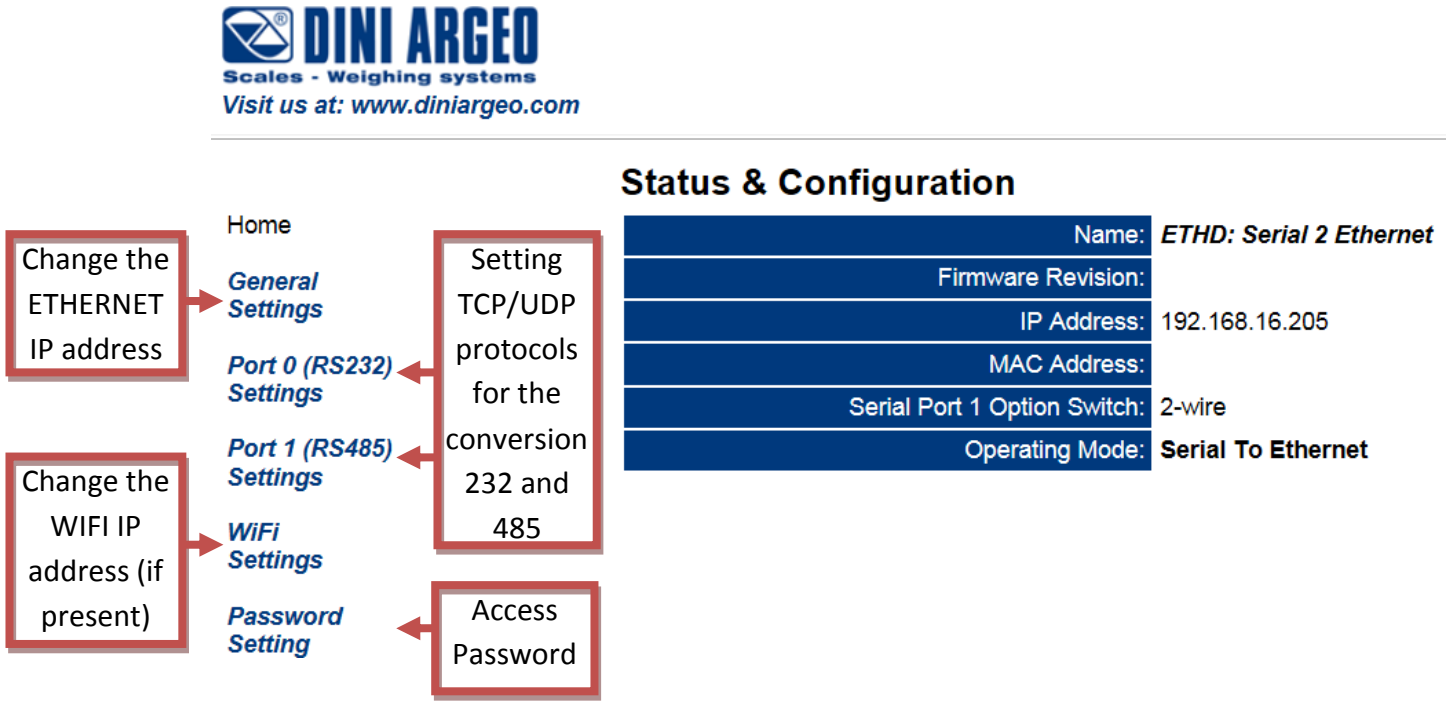
3. Open network card **Propriety**
4. Select Internet protocol version 4(TCP/IPv4)
5. Write an IP address between 192.168.16.0 and 192.168.16.255, **EXCEPT 192.168.16.205**
6. The **Subnet mask** is usually 255.255.255.0 and the **Gateway** is empty



Double click on the icon

on “Network” window, or by typing the IP address in the address bar of the browser http://192.168.16.205 you can access the configuration page.

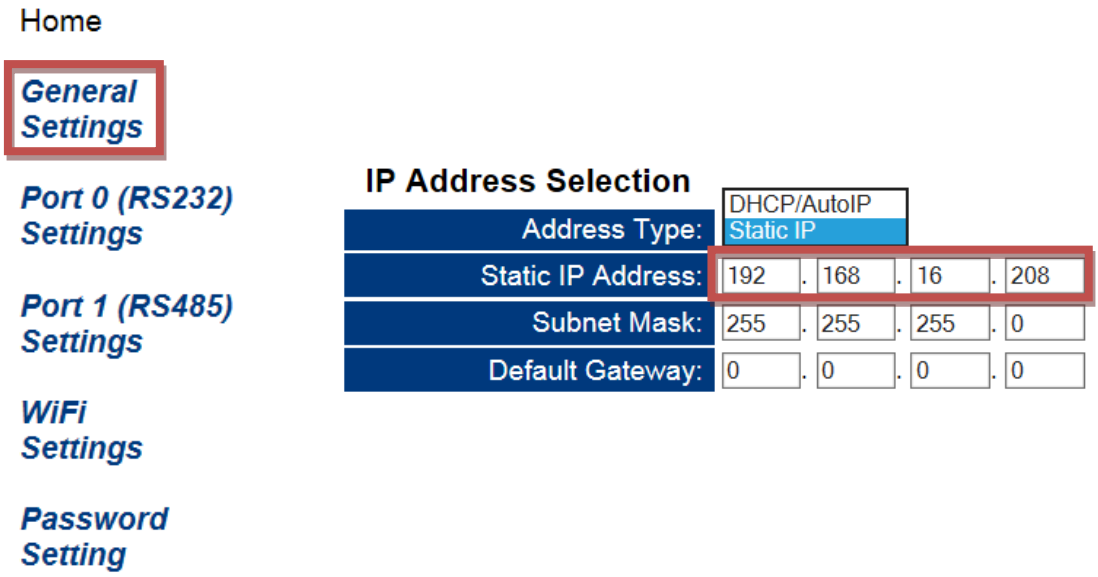
The page is arranged in 5 menus:



2 IP address modification

2.1 Ethernet

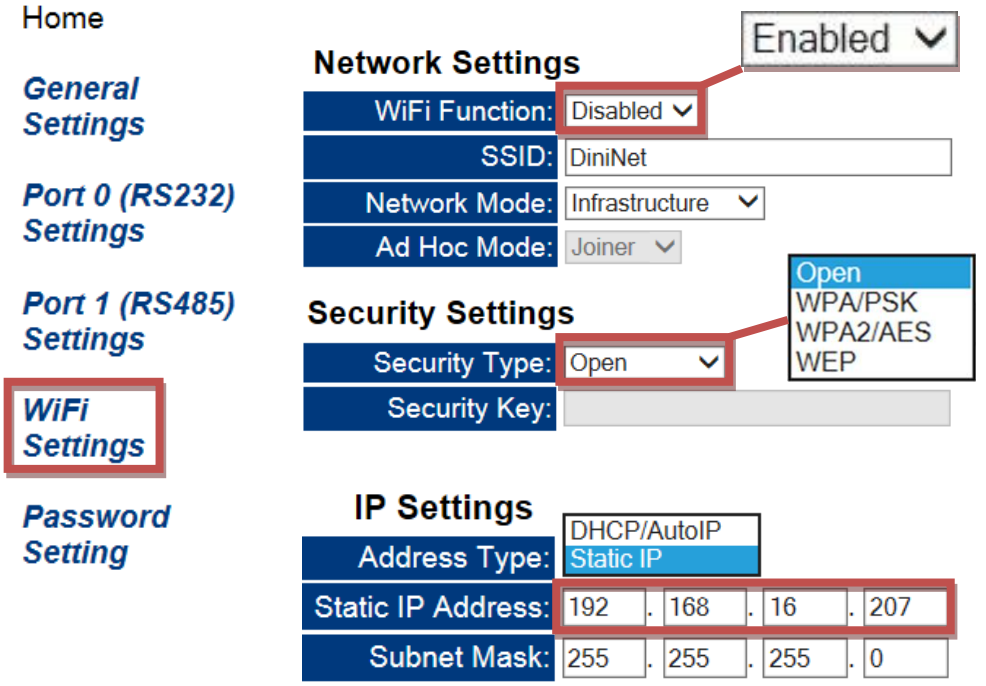
In the menu **General Settings** is possible change the IP address, subnet mask and gateway of Ethernet



2.2 WIFI (opzional)

In the menu **WiFi Settings** it is possible change the IP address, subnet mask and gateway of WIFI, SSID and type of protection WIFI, once the connection is established by WIFI, the parameters

IP Address: 0.0.0.0
MAC Address: 00:00:00:00:00:00 will be automatically filled in

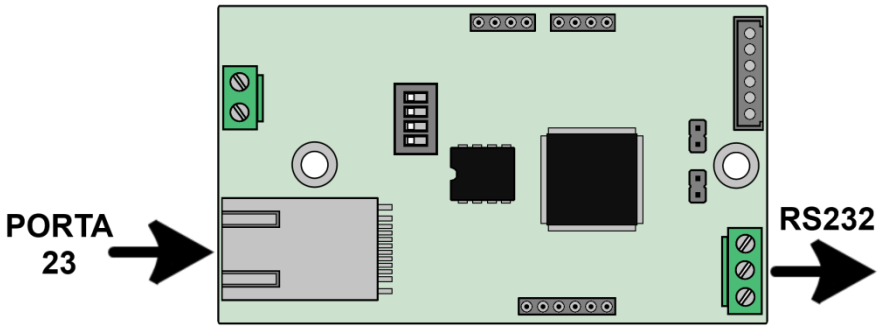


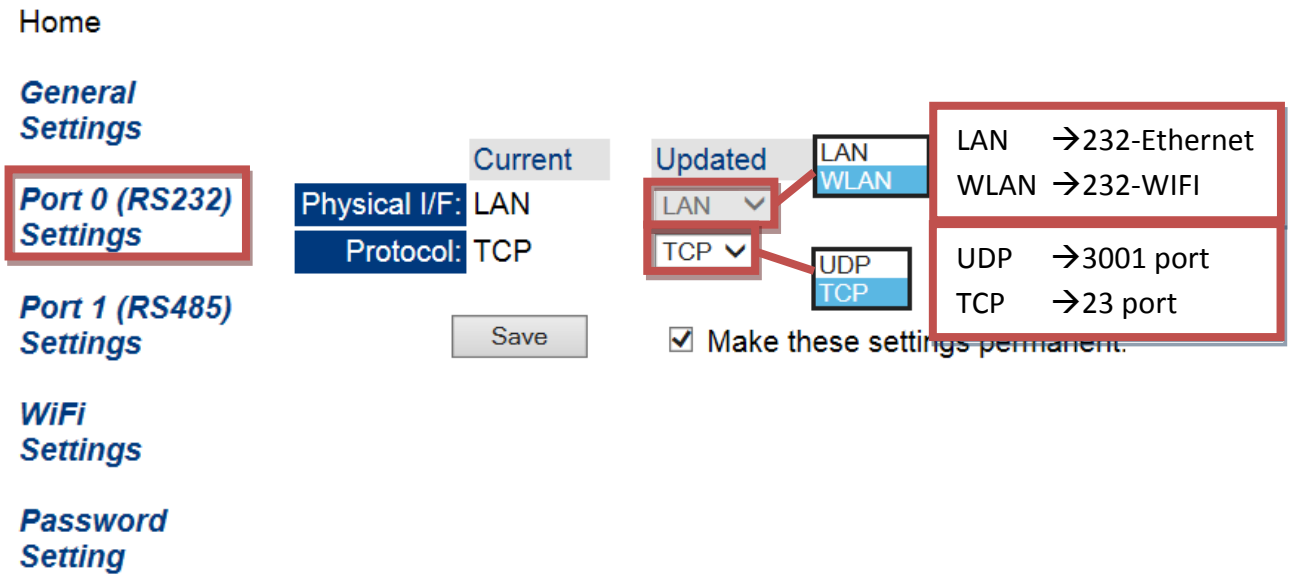
Select the encryption type and enter the Password

THE SSID DISTINGUISHES BETWEEN UPPERCASE AND LOWERCASE LETTERS

3 232-LAN/WLAN Configuration

The data transmitted via Ethernet or WIFI on port 23 (TCP) 3001 (UDP) will be redirected to the 232 serial port



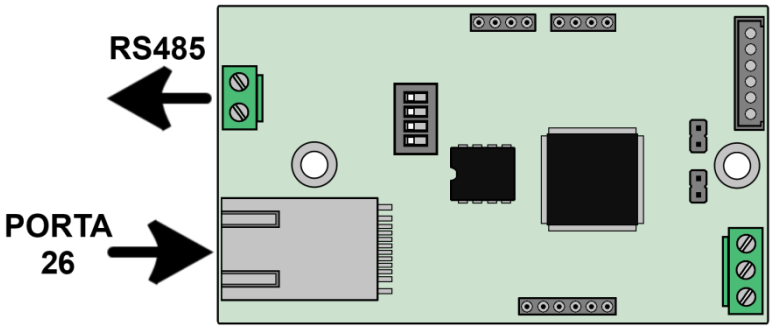


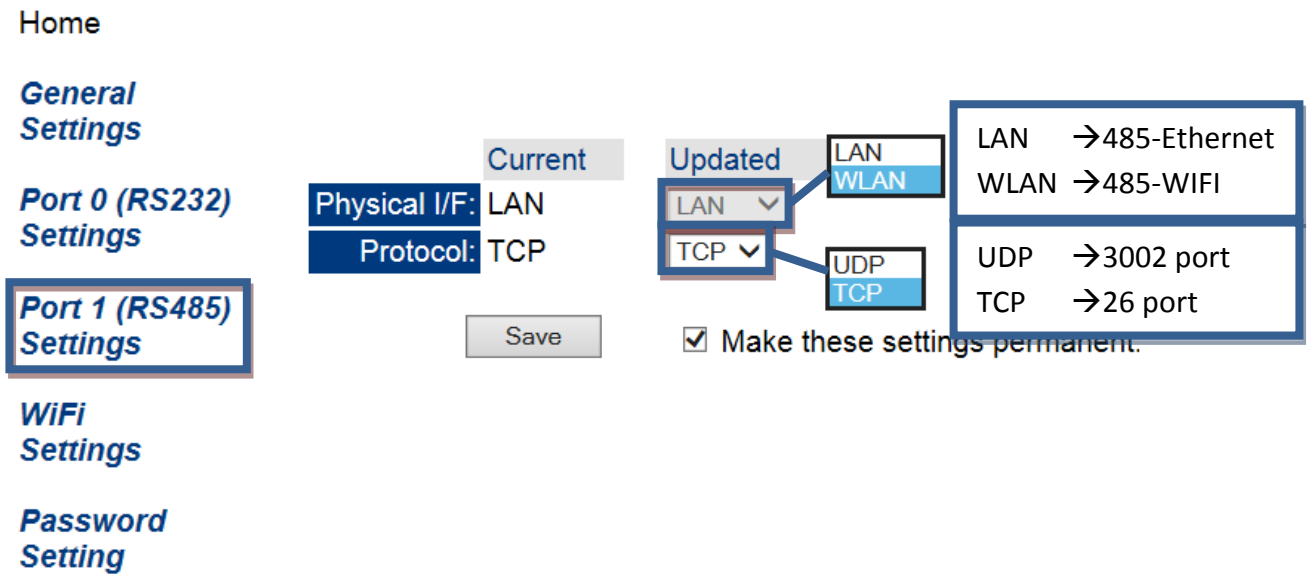
TO USE THE WIFI, SET **"ENABLED"** IN *WiFi Settings* ON THE MENU WiFi Function

AND IN Phisical I/F **"WLAN"** IN *Port 0 (RS232) Settings* AND *Port 1 (RS485) Settings*

4 485-LAN/WLAN Configuration

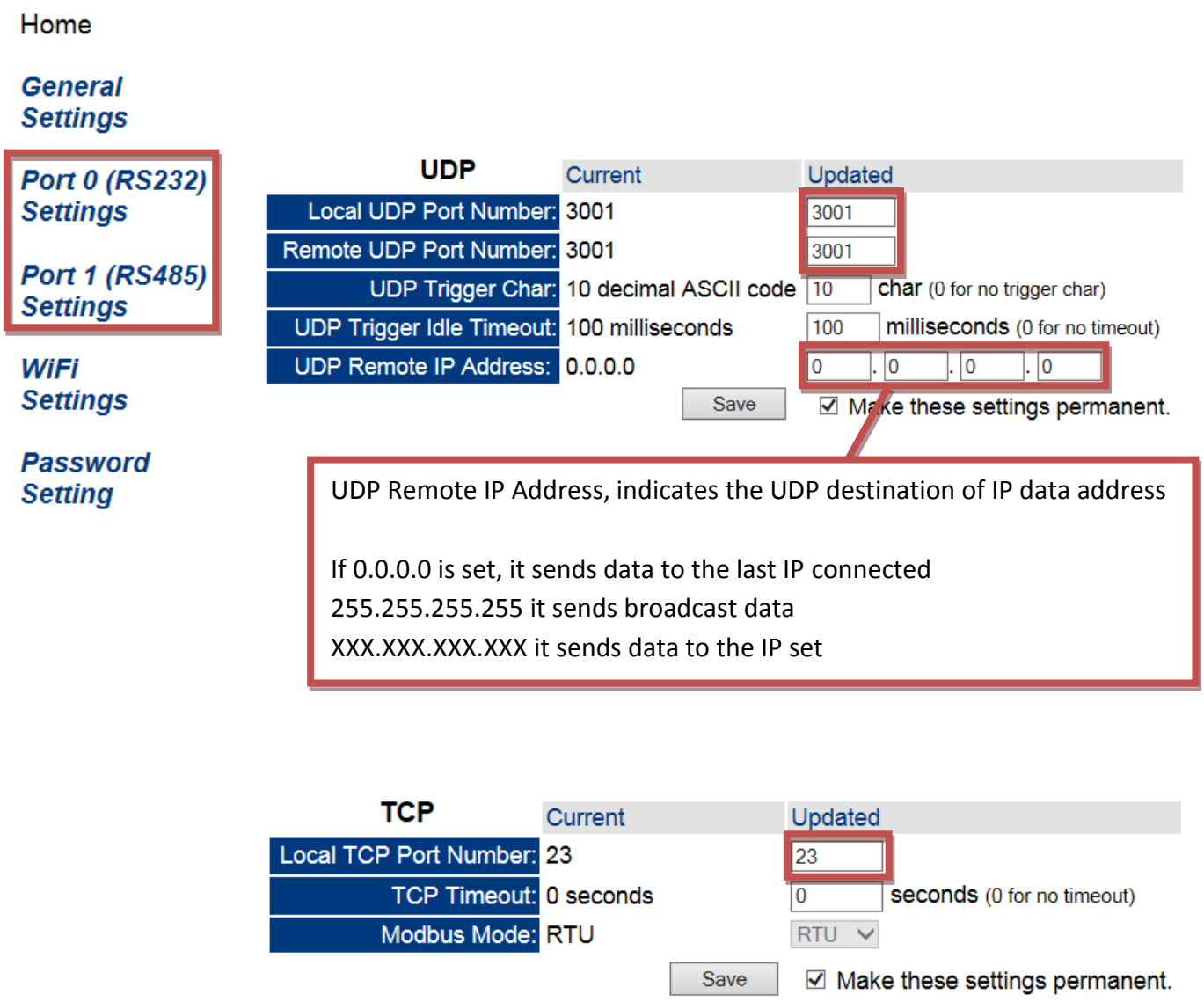
The data transmitted via Ethernet or WIFI on port 26 (TCP) 3002 (UDP) will be redirected to the serial port 485





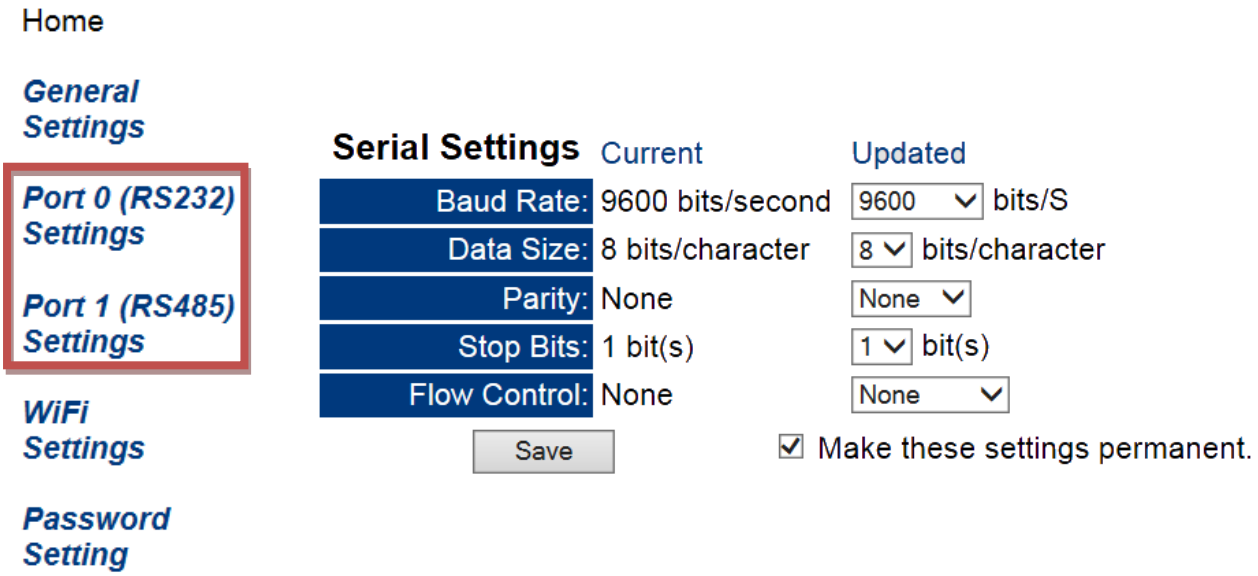
5 TCP/UDP Port configuration

For each port it is possible to change the communication parameters for both TCP and UDP ports



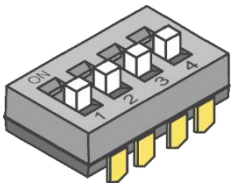
6 Serial port configuration

For each port, you can change the parameters of serial communication



7 Change the funtioning mode

The module has 4 functioning modes, selectable changing the dip-switches on the card.
Every time you change the functioning mode, the module makes a RESET, setting all default parameters and the IP address to 192.168.16.205

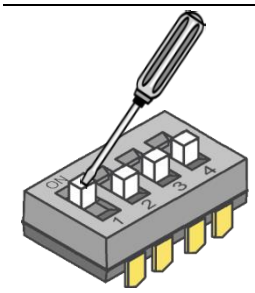


Converting Serial Ethernet or WIFI

Convert an ETHERNET or WIFI signal to 232/485.

			232	485
ON	**-**	TCP	Port 23	Port 26
OFF	**1-2-3**	UDP	Port 3001	Port 3002

It sets the serial to 9600 n-8-1

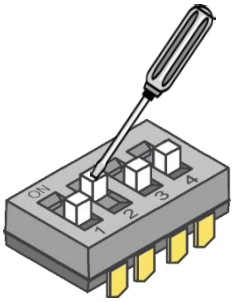


Network between instrument

Allows to connect multiple indicators to each other, sharing archives and remote scale (only for AF03)
The 485 serial port is set to Ethernet

			TCP	UDP
ON	**1**			
OFF	**2-3**	485	26	3002

It sets the serial to 115200 n-8-1

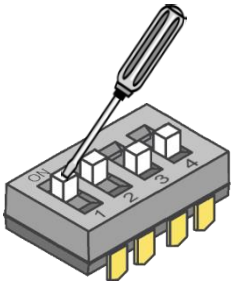


Modbus TCP

Converts Modbus to Modbus TCP ports between Ethernet/WIFI and 232/485

			232	485
ON	**2**			
OFF	**1-3**	**TCP**	Porta 502	Porta 503

It sets the serial to 9600 n-8-2

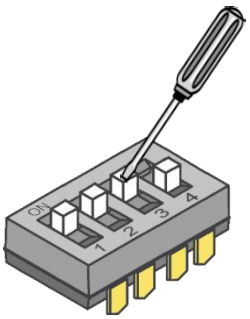


232-485 Conversion

Transforms a 232 signal to 485 and vice versa
ETHERNET/WIFI disabled

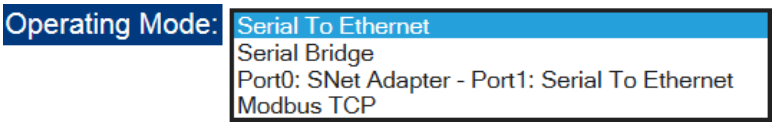
ON **1-2**
OFF **3**

It sets the serial to 9600 n-8-1



Configuration from Browser

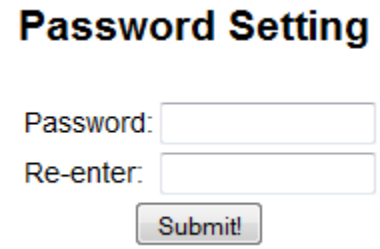
Go on ***General Settings*** and select the desired functioning mode



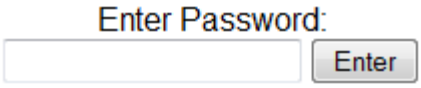
ON **1-2-3**
OFF **-**

8 Security password

Is possible to protect the configuration of the module.
If both boxes are left blank, you disable the password protection.



Then, to access the home page, you must enter the correct password, and click **Enter**:

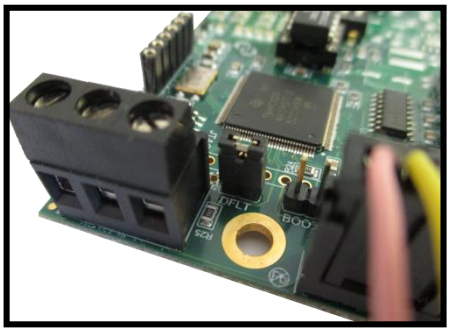


If the password has been forgotten, in order to access the configuration page you will need to perform a default module.

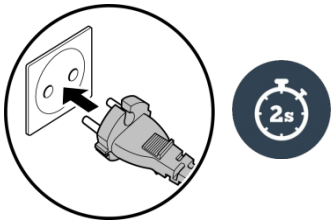
9 Default and reset of the module

You can make the default of the module, setting at factory settings in three different ways:

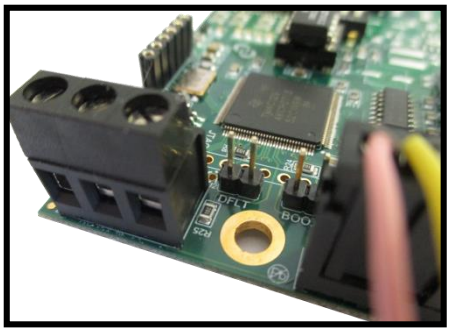
Closing the DFLT jumper



Closing the DFLT jumper

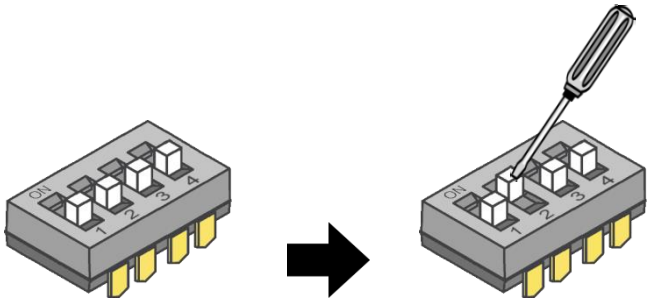


Power supply the module via the indicator and wait



When the two LEDs flash on the board, remove the jumper

Change functioning mode



Every change of the functioning mode the module will follow a default at the next restart.

Via web page

Home

General Settings

Port 0 (RS232) Settings

Port 1 (RS485) Settings

WiFi Settings

Password Setting

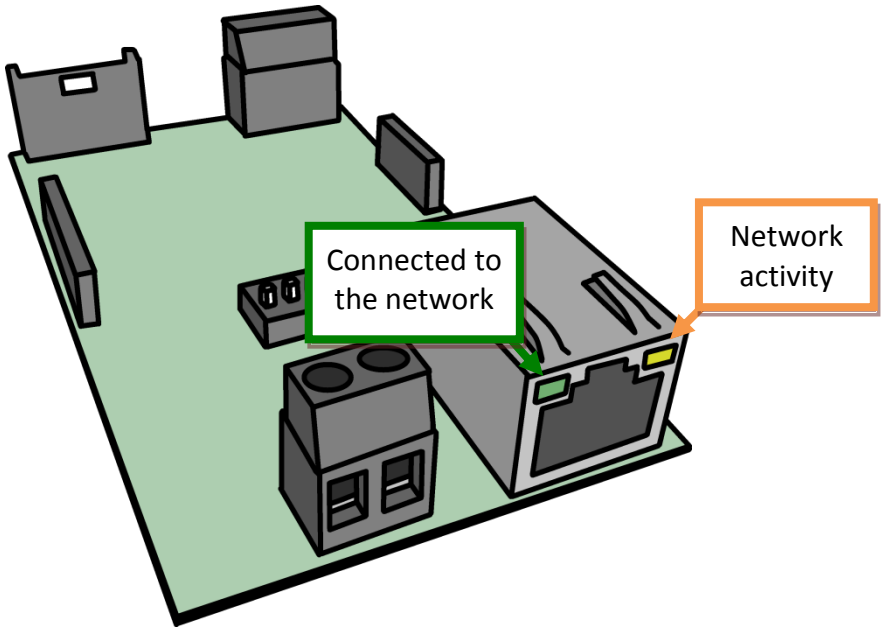
In the menu *General Settings* click on ”Restore Defaults and Reboot”

Restore Factory Defaults

Restore all options to their factory default: Restore Defaults and Reboot

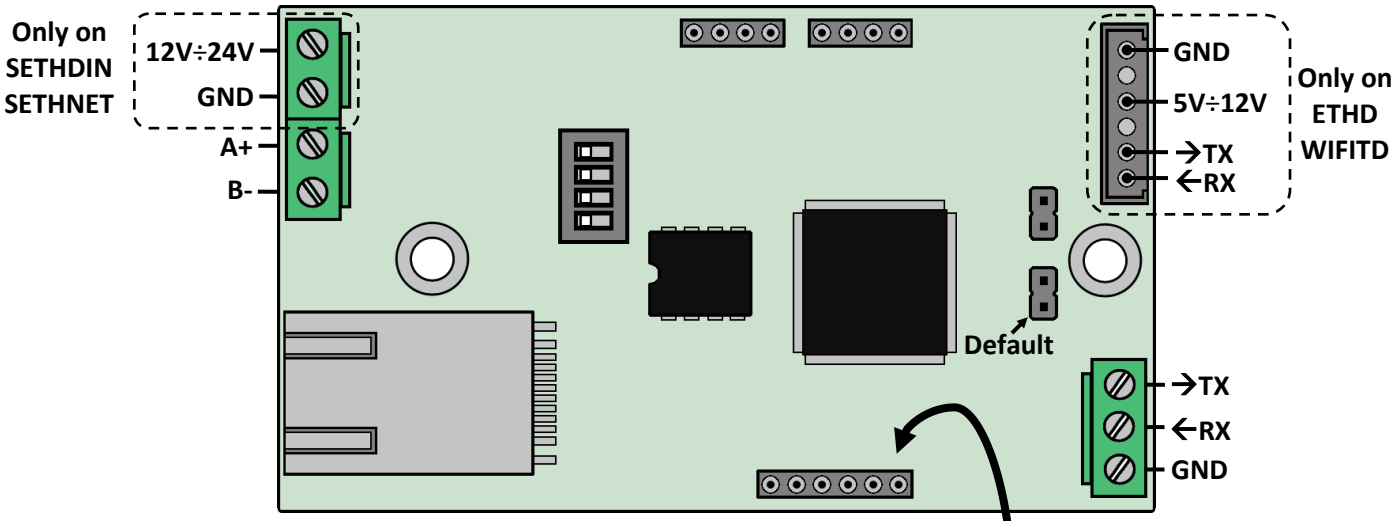
10 Technical specifications and connection

Supply voltage	+ 5 Vdc ÷12Vdc (AMP)
	+ 12 Vdc÷ +24Vdc (TERMINAL)
Max power usage	200 mA, 5W at 24Vdc.
Operating temperature	-20°C + 85°C
Protocols	TCP, UDP, DHCP, HTTP, ICMP, uPnP, ARP, Telnet
WEB interface	10/100 Base-T.
Communication Rate	10/100Mbps.



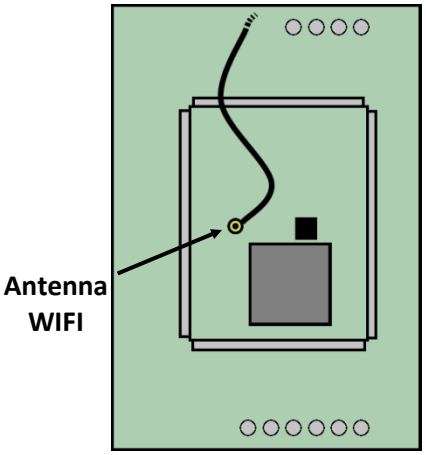
*Pictures may be different depending the model

10.1 ETHD connectors

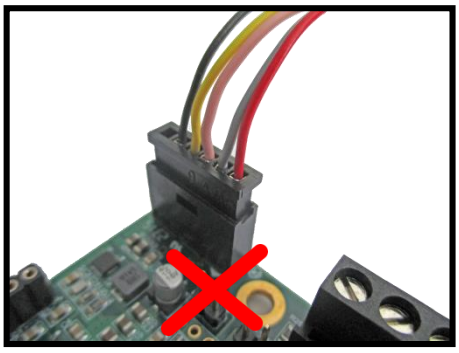


10.2 WIFI module

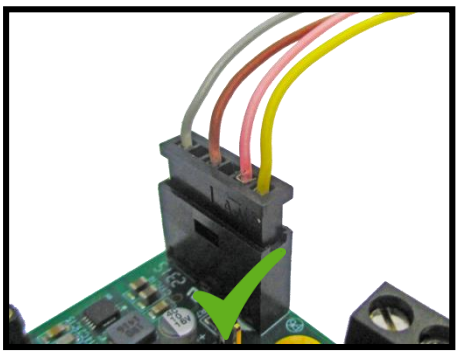
WIFI module, if present, It is positioned on the ETHD connectors



THE AMP OF THE OLD ETH ARE NOT COMPATIBLE WITH THE ETHD

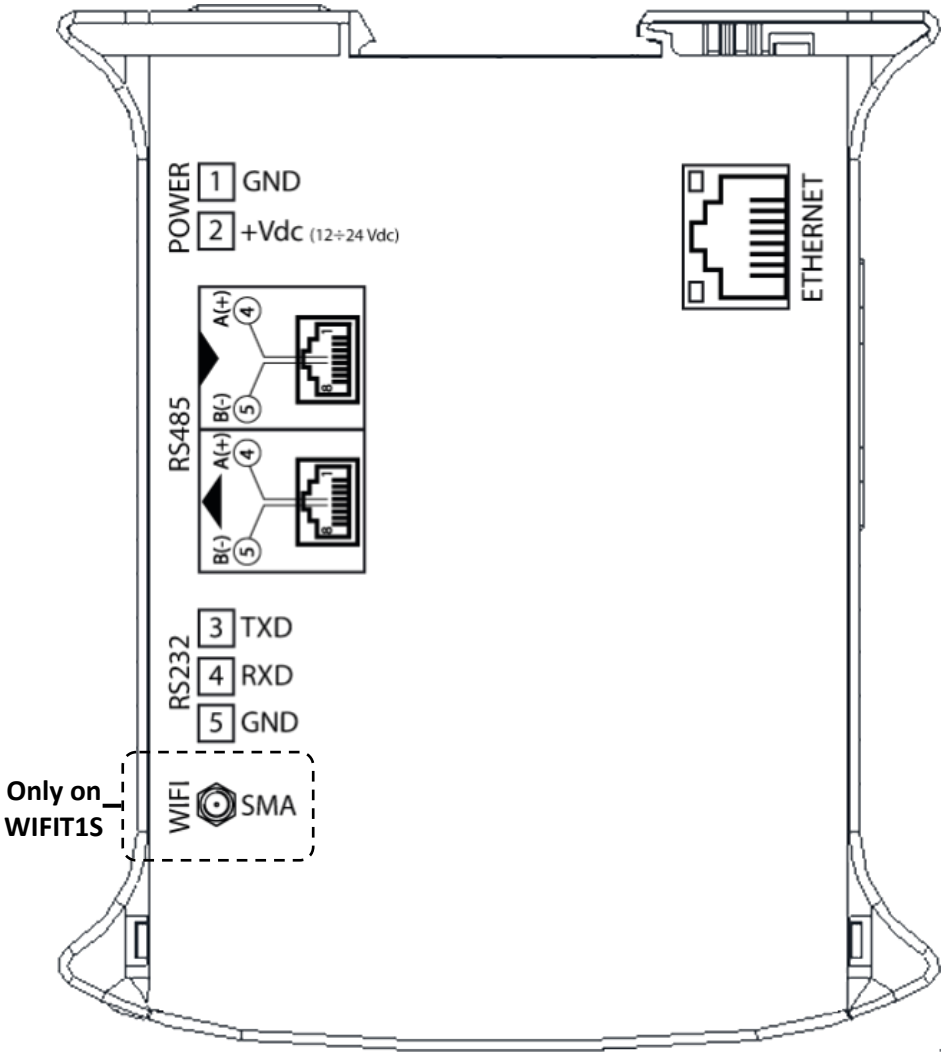


ETH



WIFITD

10.3 ETH1S/WIFIT1S connectors

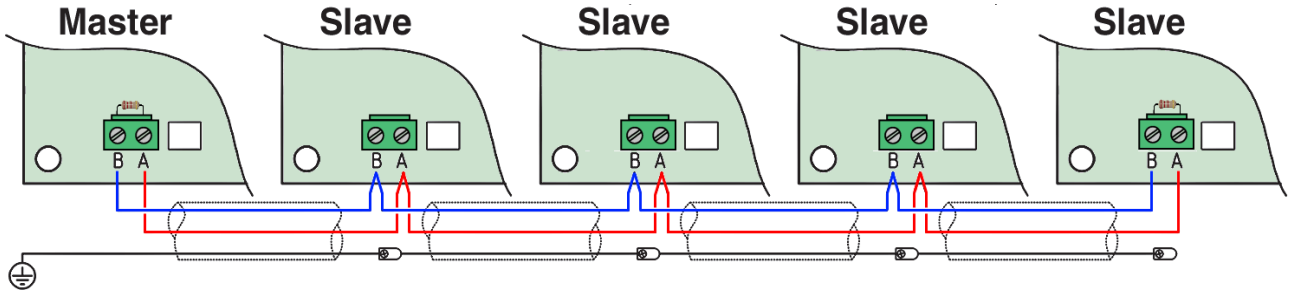


The connectors are on the side, on the narrow profile

10.4 RS485 connections

On the same RS485 port you can connect up to 32 devices in parallel, as an indicator, digital load cells, conversion cards,DGX or 485/232 converters.

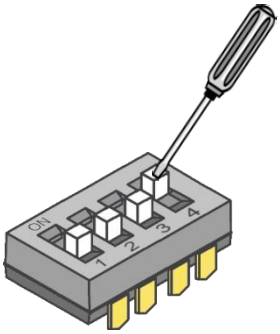
The connection is made using a twisted pair cable connecting the devices to each other A+ with A+ and B- with B- while the 485 shield is connected to ground.



By passing 485 cables near power cables it may introduce noise on the data lines interfering with the correct communication

10.5 Terminator resistance

By connecting more devices between them it is necessary to insert a terminator resistance generally of 120Ω between A+ and B- at the beginning and end of the chain.



The module has already this built in resistance, activating the switch 4 on the board.

By enabling this switch, the module will not perform any default.