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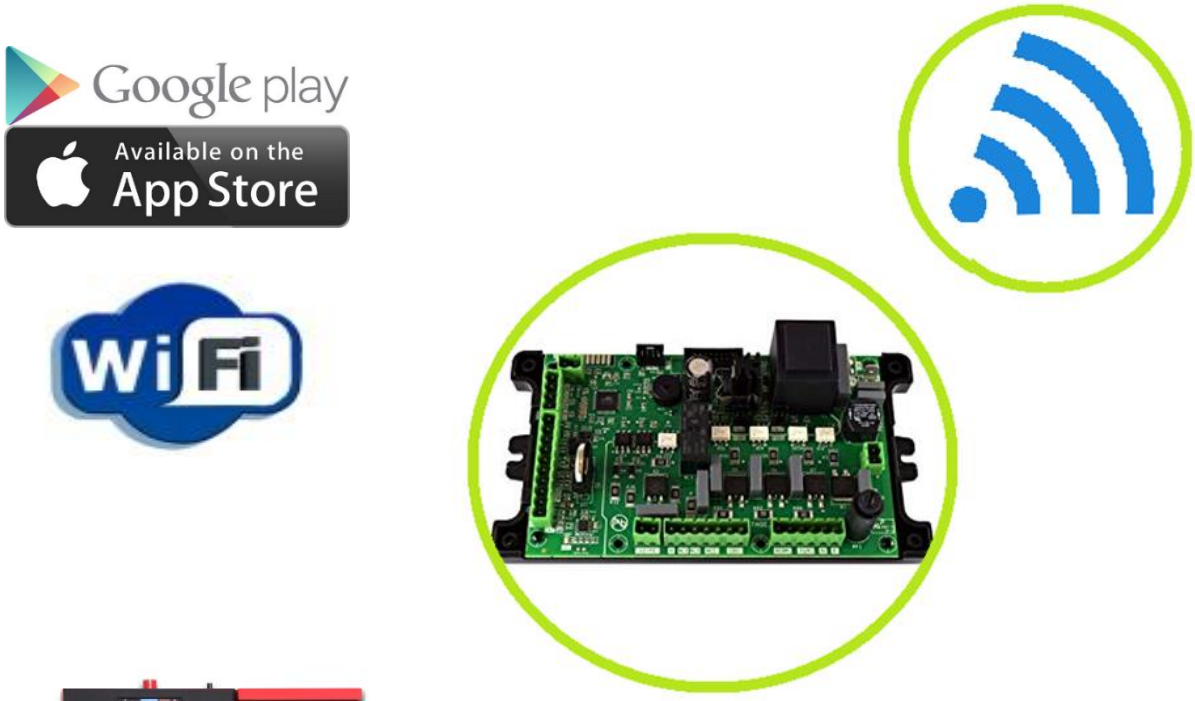
Wi-Fi module



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Notes

Instructions notes

- Read these instructions for proper use of the device. Following the instructions in this manual, you will avoid the dangers, costs resulting from improper use, and you can extend the lifetime of the appliance or boiler.
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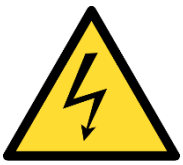
- ThermoFLUX d.o.o. constantly develops and improves its products, so we reserve the right to make changes to the information and technical details contained in this manual without prior notice.
- These instructions are carefully prepared. However, ThermoFLUX d.o.o. does not take responsibility for errors or omissions. We also assume no responsibility for the use and harm to the information contained herein.

Warning signs

The commisioning can only be done by an qualified technician, when the boiler/-stove is OFF.

CAUTION! Electronic circuits can be damaged by electrostatic discharge.



ATTENTION! Before servicing, you must disconnect the power supply (through a separate fuse) and inspect the power supply! Ensure that the installation is swithed off.

Electronic components can be recycled.

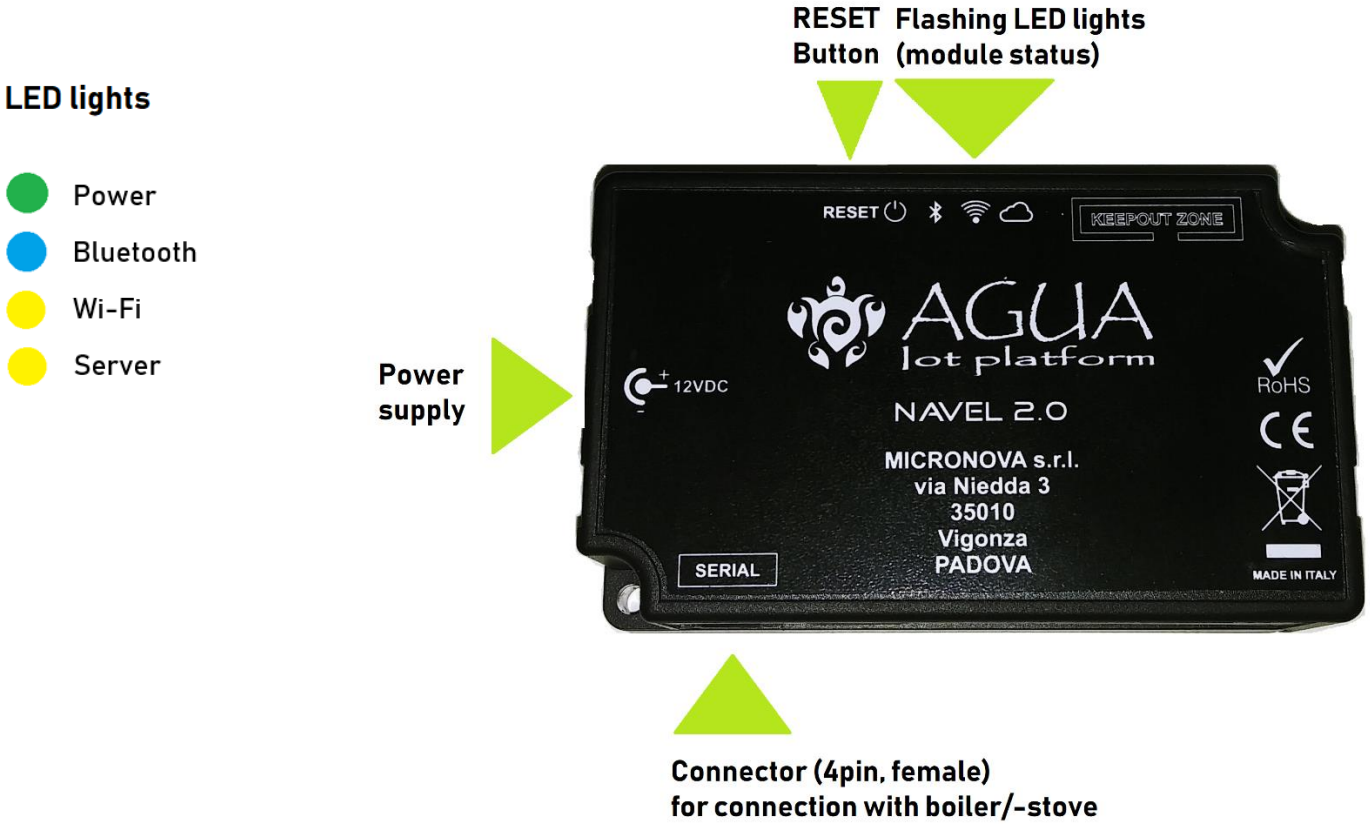
Wi-Fi modul

Description

Designed for communication and control of boiler or stove operation via mobile device. Compatible with Android, IOS and Windovs devices. The user can have full control over the boiler/-stove via the application, and that means:

- Turn ON, turn OFF
- change the power of work,
- change the temperature and
- to program delayed ignition and shutdown times.

The Wi-Fi module case is made of plastic (PVC) with a label with the description of the device, version and on the back there is a label with a QR code for reading the MAC address. The Wi-Fi module has connectors for power supply and for the connection with the boiler or stove. The picture below shows the location of the RESET button and the flashing LED lights that indicate the current status of the WiFi module.



Technical data

Power supply	12 VDcc, 1000mA
Operating ambient temperature	od 0°C do 70°C
Operating frequency	2402/2472 MHz
EIRP level	14/16 dBm
Dimensions	56x94x30 mm
Installation position	anywhere

Wi-Fi equipment

- SERIAL, 4pin, male-male cable (fig. 2.)
- SERIAL-DSUB 9-4pin, female-male cable (fig. 4.)
- Power supply 220/12 V AC/DC, 1000mA (fig. 3.)
- Velcro (fig. 1.)

Figure 1.

Figure 2.,

Figure 3.,

Figure 4.

NOTE

The support power supply suplied in the kit comlies with the EN 60950-1 directive, and has the following characteristics:

- SELV (very low safety voltage).
- Protected againts short circuits and overcurrents;.
- Limited power source (Low power source LPS).

Meaning of icons

(1) RESET Key

If pressed for 5 seconds, it disconnects the module from the Wi-Fi or BLE connection and returns it to "AP" status.

(2) LED Power

ON, module is powered

(3) LED Bluetooth

ON continuosly, activate "BLE" mode

(4) LED Wi-Fi

Lit continuously, active Wi-Fi connection of the module

Flashing, the module is connecting to the Wi-Fi network.

(5) LED Server

Continuously connected to the server.

Flashing, the module is connecting to the server

Connection procedure

Connect

The connection of a Wi-Fi module to boiler/-stove control is shown in steps bellow. Depending on the type of boiler or stove, connect one of the two appropriate serial cables to the control (boiler/-stove) mainboard.

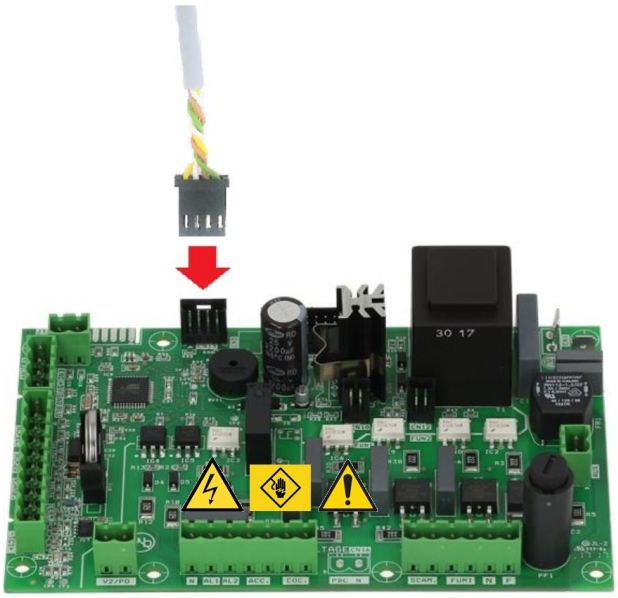


Figure 5. SERIAL cable and boiler mainboard connection

Figure 6. SERIAL cable and Wi-Fi module connection

Supply the Wi-Fi module with the support power supply. The device is powered if the green Power LED is on.

Figure 7. Power supply for Wi-Fi module

Figure 8. Wi-Fi module connected to Pelling boiler

User registration procedure

Download and install the "Nina" app from Google Play or Apple Store.

1. Open the application and proceed with registration (written "Subscribe") by entering the following:
    - Email adress;
    - Dedicated password for the application (minimum 8 charecters)
    - Password verification copy
    - Consent to privacy.
2. Press the "Subscribe" button and wait for the email containing the 6-digit code useful for activating the account.
3. Enter the 6-digit code received code received by e-mail and press the "Activate" button to access the application.

Boiler/-stove registration procedure

1. Open the stoves management application and enter the login/authentication data to perform the "Login".
2. From the "My Stoves" screen, press the "+" button at the bottom right to add a boiler or stove.
3. Scroll to the configuration wizard screen and press the "Enter Data" button.
4. Insert the required data progressively:
    - Serial number of the boiler/-stove (shown on the back of the boiler or stove on a silver label) using the "barcode capture" function;
    - MAC address (shown on the label supplied with the Navel user manual) using the "QRcode" capture function;
    - Registration Code (Reg. Code) (shown on the label supplied with the navel user manual);
    - Boiler/-stove location data (optional data);
    - Press the "Save stove" button.

Wi-Fi configuration

Configuration procedure

1. Supply the Wi-Fi module with the support power supply and connect it to the stove or biomass boiler using serial cable supplied. Verify that the Wi-FI module is connected end powered (green power LED on).
2. Open the stoves managment application and enter the login/authentication data to perform the "Login".
3. Acces the smartphone's Wi-Fi settings and connect to the Wi-Fi network whos name begins with the "T009_xxxxxx" character sequence (the "x" correspond to the last 6 characters of the Wi-Fi module MAC adress).
4. Go back to the application and from the "My stoves " screen, press the contextual menu button (the three vertical black dots on the side of the recorded stove) and select "Configure Navel" (a screen with a number of seconds will appear for a couple of seconds MAC and AP password data.
5. Select from the list, the Wi-Fi network to be used for application data communication, scroll to the bottom of the screen and enter the password (if any) of the selected Wi-Fi network and press the "Connect" button.
6. Wait, then confirm the connection of the Wi-Fi module to the selected Wi-Fi network, turn on the orange LED's Wi-FI and server (4 and 5 section "Meaning of icons").

NOTE:

In case of failure to connect to the Wi-FI network, proceed with the RESET (see " RESET Button" section "Meaning of icons" of the guide) of the Wi-Fi module and start again from the procedure 5. previously described.

7. Once you have confirmed the connection between the module and Wi-Fi network, close the screen using the "back button on your smarthphone.
8. Acces the smartphone's Wi-Fi settings, deactivate the Wi-Fi connection created with the Wi-Fi module and connect to the data network used by default.
9. From the "My Stoves" screen, press the name of the stove to connect and manage it.

EU LABEL

The radio equipment (in this manual) complies with the following directives: RED 2014/53/EU; ROHS 2011/65/EC; WEEE 2012/19/EU.

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