

Easy Comfort at App
Installation manual
(to be carried out before the registration procedure)

Nordgas “iModule” System: components list

- a) iModule, data transmitter/receiver unit, available in both GSM (“Global System for Mobile Communications”) and Wi-Fi (“wireless local area network based on IEEE802.11 standards”) version;
- b) Local-Controller and Remote control, for room temperature detection and manual adjustment, in case of errors/faults of the iModule unit;
- c) App “iModule”, available for free for iOS (Apple iPhone/iPad) and Android:
<https://play.google.com/store/apps/details?id=it.nordgas.iModule&hl=it> per Android
<https://itunes.apple.com/it/app/iModule/id826530264> iOS (Apple iPhone/iPad)

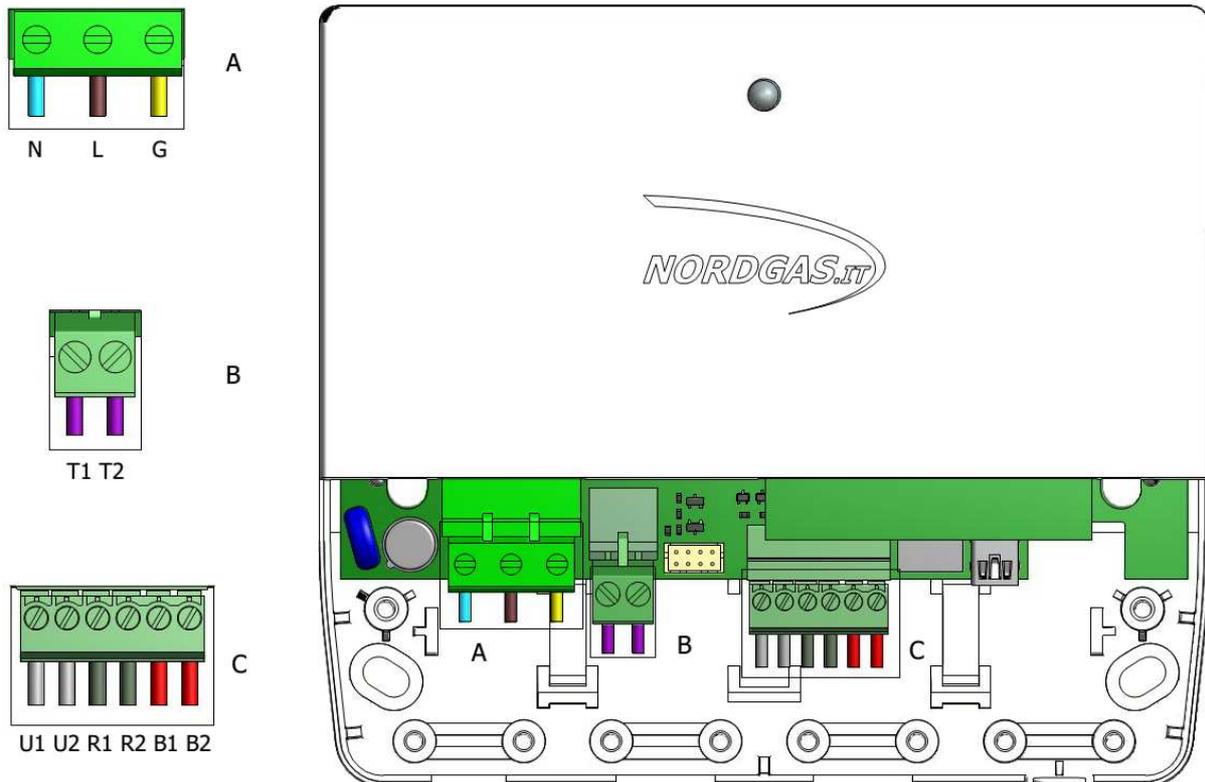
For Username and Password, see the registration procedure.

Boiler connection guide

Install Local-Controller or Remote Control in the ambient environment within the home, for example in the same location of your previous Room-Thermostat/Remote-Controller;

- Install iModule in any internal portion of the house (home, garage, cellar, boiler room), with an acceptable GSM signal (for iModuleGSM version), or close to the Router/Switch Wi-Fi (for iModuleWi-Fi version);
- Connect iModule and Local-Controller by Open-Therm (2 wires);
- Connect iModule and the Boiler (2 wires) by Open-Therm or Room Thermostat;
- Connect iModule to power-supply (230VAC);

Refer to the following figure for connection diagrams and wiring:



Connector A (Power-Supply):

- N → Neutral line of the power supply cable (Single-Phase Alternating-Current, 230 VAC, 50 Hz)
- L → Phase line of the power supply cable (Single-Phase Alternating-Current, 230 VAC, 50 Hz)
- G → Ground line of the power supply cable (Single-Phase Alternating-Current, 230 VAC, 50 Hz)

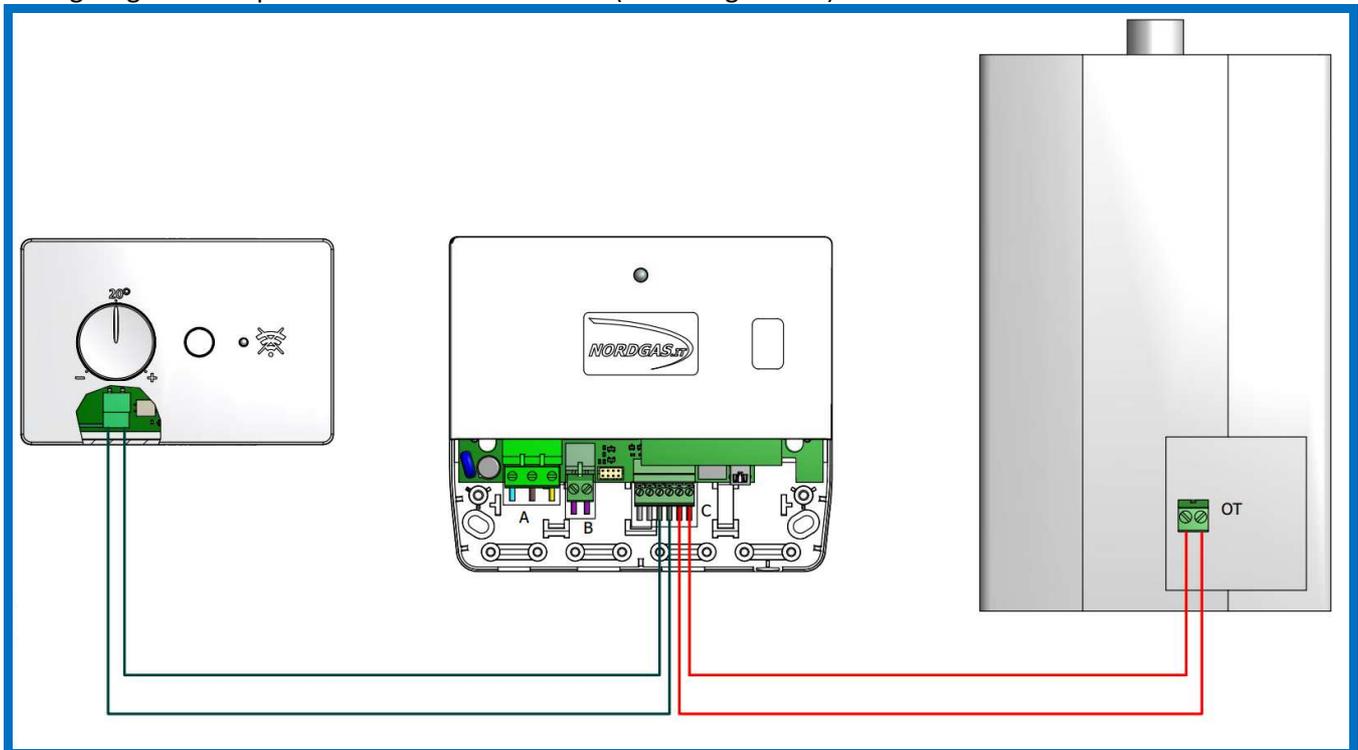
Connector B (for RT-configuration only – Room Thermostat):

- T1 and T2 shall be connected to the boiler, to activate the central-heating request by Room thermostat relay;

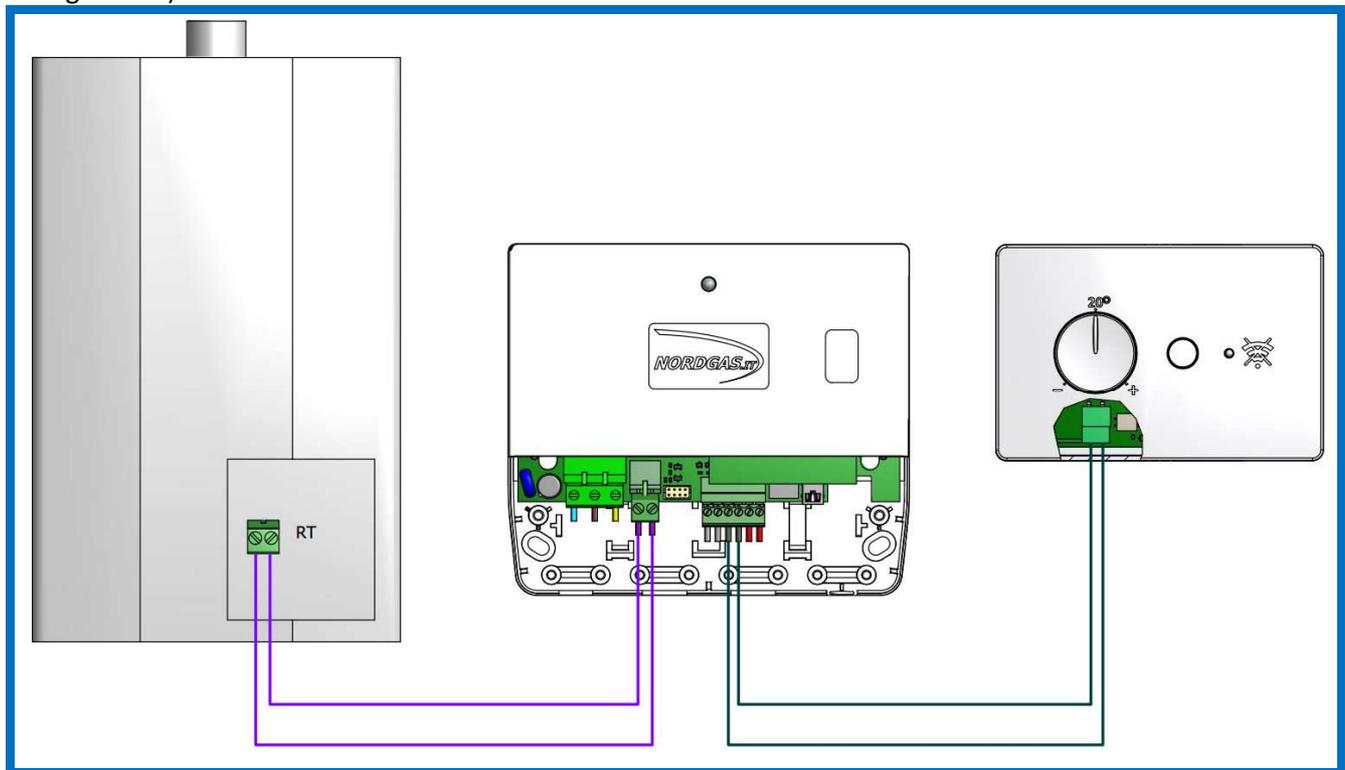
Connector C (Open-Therm wiring):

- B1 and B2 shall be connected to the Open-Therm bus of the boiler
(for OT-configuration only – boiler type = Open-Therm);
- R1 and R2 shall be connected to the Local Controller or Remote control;

Wiring diagram for Open-Therm Boiler connection (OT-configuration):



Wiring diagram for Room thermostat connection (RT-configuration):

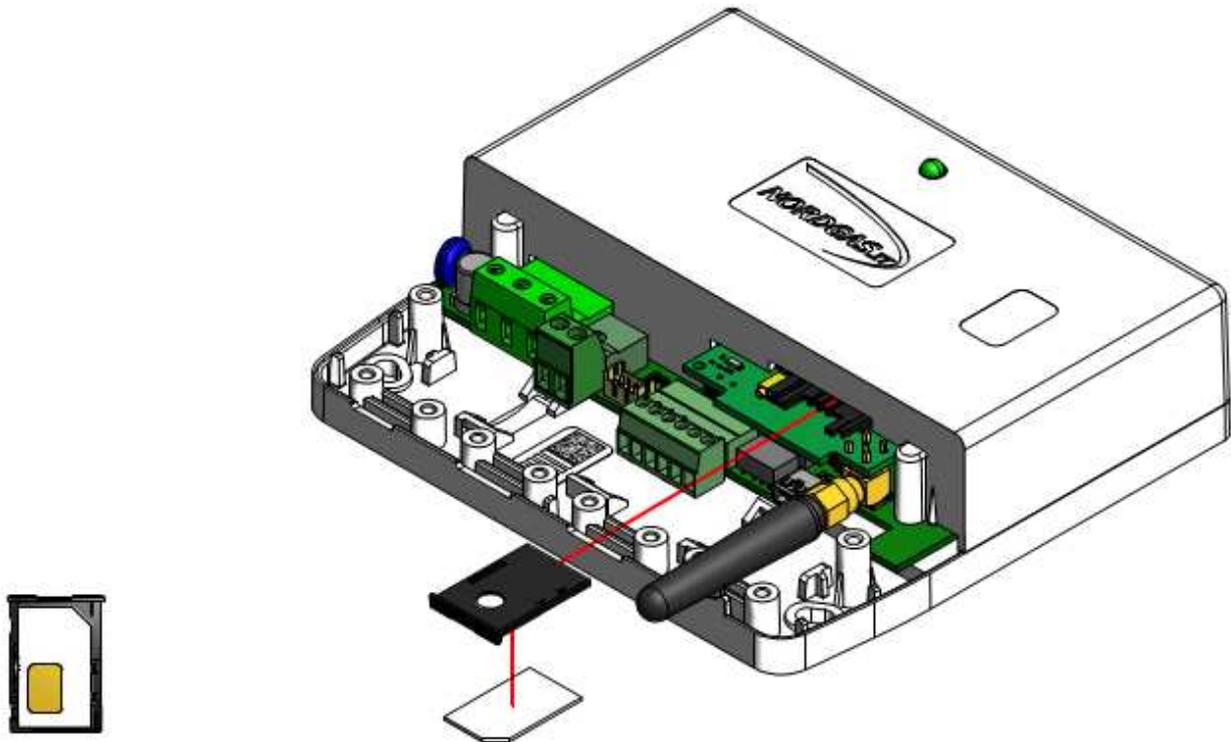


New iModule unit configuration procedure

Once the installer / user has connected correctly all system units, powered the system and correctly done the registration on the website, it will be possible to proceed with the configuration of the data connection.

iModule configuration (for technicians and users) - GSM version

1. Use SIM with an internet flat subscription (about 400MB/monthneeded);
2. The PIN ("Personal Identification Number") of the SIM ("Subscriber Identity Module") shall be disabled;
3. Insert the SIM in the iModule, refer to the following image:



4. Send an SMS to the mobile phone number relevant to the SIM ("Subscriber Identity Module") card inserted within iModule, in the following format: "APN:xxx#"

The APN ("Access Point Name") depends on the GSM provider of the SIM card inserted within iModule; examples for Italian GSM providers:

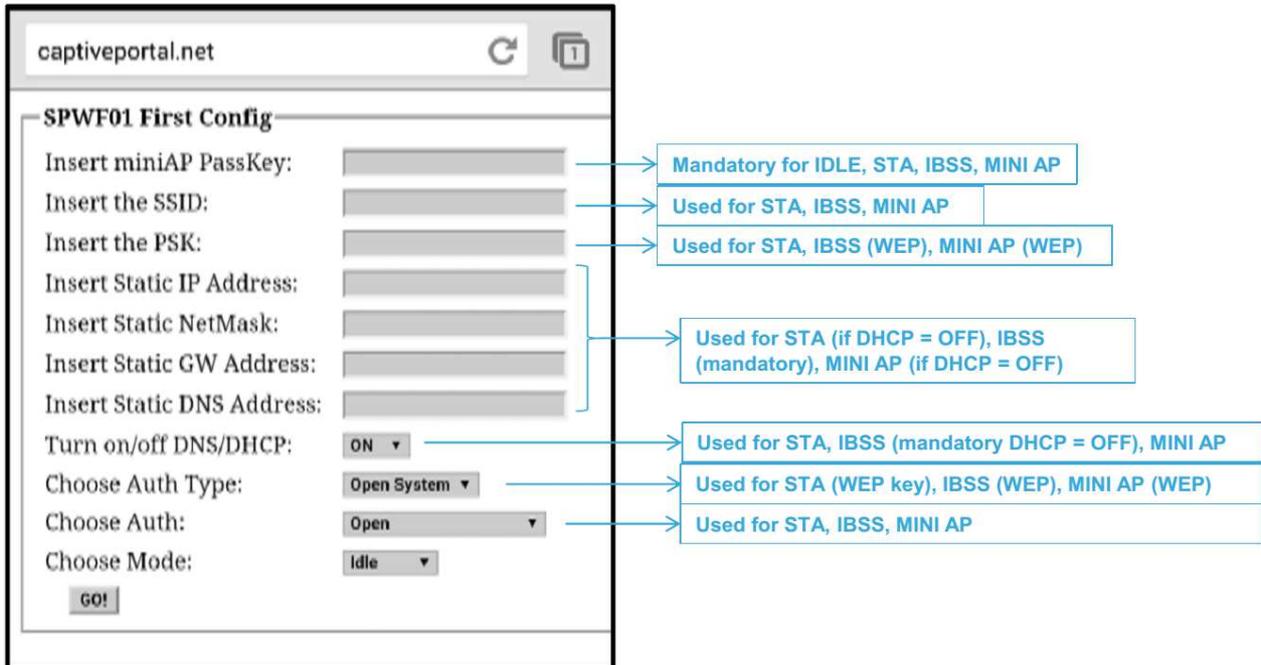
- xxx=ibox.tim.it
- xxx=mobile.vodafone.it
- xxx=internet.wind

Example of SMS to be sent to iModule:

APN:internet.wind#

iModule configuration(for technicians and users) - Wi-Fi version

- 1 Provide power-supply to iModule (by means of Connector A, see above);
- 2 For 4 minutes, the Wi-Fi network "iModule_WiFi" is activated; that's an Open Wi-Fi network, no password needed to access;
- 3 Connect a Wi-Fi device (PC/Laptop/Tablet/Smartphone) to "iModule_WiFi" network;
On the Wi-Fi device, open any Web-Browser and type in the address bar: <http://captiveportal.net>; the WebBrowser shows the following web-page:



The screenshot shows the 'SPWF01 First Config' page on captiveportal.net. The form includes the following fields and callouts:

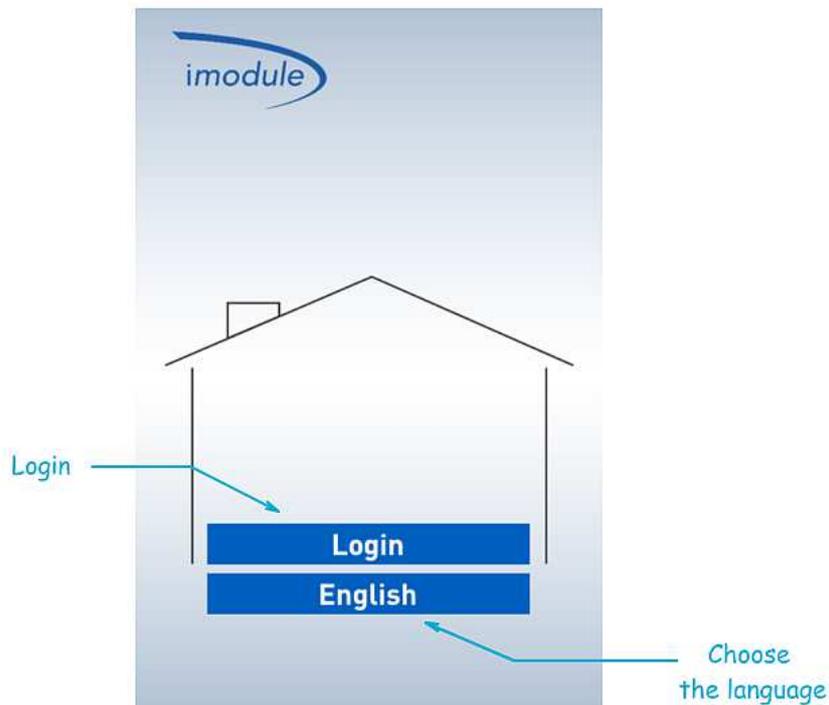
- Insert miniAP PassKey:** Mandatory for IDLE, STA, IBSS, MINI AP
- Insert the SSID:** Used for STA, IBSS, MINI AP
- Insert the PSK:** Used for STA, IBSS (WEP), MINI AP (WEP)
- Insert Static IP Address:** Used for STA (if DHCP = OFF), IBSS (mandatory), MINI AP (if DHCP = OFF)
- Insert Static NetMask:** Used for STA (if DHCP = OFF), IBSS (mandatory), MINI AP (if DHCP = OFF)
- Insert Static GW Address:** Used for STA (if DHCP = OFF), IBSS (mandatory), MINI AP (if DHCP = OFF)
- Insert Static DNS Address:** Used for STA (if DHCP = OFF), IBSS (mandatory), MINI AP (if DHCP = OFF)
- Turn on/off DNS/DHCP:** ON (Used for STA, IBSS (mandatory DHCP = OFF), MINI AP)
- Choose Auth Type:** Open System (Used for STA (WEP key), IBSS (WEP), MINI AP (WEP))
- Choose Auth:** Open (Used for STA, IBSS, MINI AP)
- Choose Mode:** idle

- The web page <http://captiveportal.net> is provided by iModule and lies within iModule; the page has the only purpose of allowing the Wi-Fi configuration of the iModule;
 - If the web-page <http://captiveportal.net> is not quickly opened, it's suggested to turn off an eventual proxy server (check the connection settings or browser preferences);
 - Suggested browser: Internet Explorer®, Mozilla Firefox®, Safari®;
- 4 Fill the following information:
 - a. Insert miniAPPassKey: nordgas
 - b. Insert the SSID: name of the Wi-Fi network that iModule will to connect to
 - c. Insert the PSK: password of the Wi-Fi network that iModule will to connect to
 - d. Discard the next 4 fields "Insert Static IP Address", "Insert Static NetMask", "Insert Static GW Address" and "Insert Static DNS Address"
 - e. Turn on/off DNS/DHCP: choose "ON"
 - f. Choose Auth Type: choose "Open System"
 - g. Choose Auth: choose "WEP" or "WPA/WPA2" or "Open" according to the security protocol of the WiFi network to connect to
 - h. Choose Mode: choose STA (Station)
 - 5 Finally, press "GO!"; after a few seconds, the network "iModule_WiFi" is disabled by iModule unit, with relevant automatic disconnection of the Wi-Fi device;
 - 6 On the iModule APP, wait for max 3/5 minutes to verify the refresh of the Room Temperature shown;

NOTE: in case that's required to repeat again the Wi-Fi configuration (for example when you need to change one or more parameters of the Wi-Fi network to connect to), remove the power-supply of the iModule, and then repeat the configuration procedure.

Fist boiler configuration using iModule system

Once ended all configuration points, the green led of iModule will start to blink slowly. Now is possible do the login through the iModule application with the credential set during iModule registration.

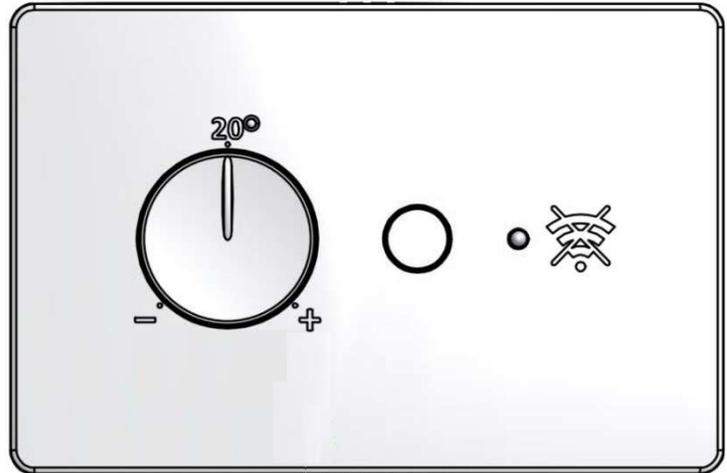


Remote Control and iModule user manual

(Local-Controller is sold with the basic iModule system version) :

The local controller is equipped with a room temperature sensor to control the home comfort.

It's possible to manage the boiler (e.g.: adjusting the domestic comfort) in Local mode by means of a button and a knob; in Remote mode, however, the APP directly manages the boiler and then all settings are made via tablet or smartphone.



Functionality:

- Button: selects between Local mode and Remote mode;
- Knob: used for setting the room set-points (at Local-Controller) in the range from 10 °C to 30 °C, valid only in Manual mode;
- Green Led:
 - 1 Steady ON: local mode active (boiler managed by Local-Controller);
 - 2 1 flash for seconds: remote mode active (boiler managed by iModule application);
 - 3 Slow Blinking (1 flash for second): local mode active (power supply to iModule has been removed – the boiler is directly managed by Local-Controller);
- Red Led:
 - 1 Steady ON: fault on Open-Therm communication toward iModule or boiler;
 - 2 Steady OFF: no faults;
 - 3 Slow Blinking (1 flash for second): fault on room temperature sensor (within Local-Controller);
 - 4 Fast Blinking (5 flashes for second): fault on iModule (missing communication toward APP);

Remote Control

(Remote control is sold with the advance iModule system version)

This remote control provides a real time status of iModule system. It can show all temperatures of boiler and the flame presence (OpenTherm setting); for more details please refer to dedicated user manual.



iModule:

In case of failure of iModule unit, or when there's no data connection by GSM or Wi-Fi, you can disable the operation of iModule and directly connect the boiler to the Local-Controller/Remote control: so, the boiler can always be locally managed by the user. If the power supply is removed by iModule, local mode becomes active.



iModule LED functionality:

- Green Led Steady ON: remote mode (boiler managed by APP);
- Led alternatively blinking Red and Green iModule not yet configured; or on Wi-Fi version, configure the Wi-Fi network to connect to (see below for details); or for GSM version, send an SMS to configure the APN;
- Green Led very Slow Blinking (1 flash every 2,5 seconds): Local mode (boiler managed by Local-Controller);
- Green Led Slow Blinking (1 flash per second): data-exchange by GSM/Wi-Fi is being executed;
- Green Led Fast Blinking (5 flashes per second): Wi-Fi configuration (mini access-point) is being executed;
- Red Led Steady ON: fault on GSM/Wi-Fi connection;
- Red Led Slow Blinking (1 flash per second): fault on communication with Local-Controller;
- Red Led Fast Blinking (5 flashes per second): fault on communication with the boiler (if iModule configured as "Open-Therm");
- Both Led Steady OFF: power-supply to iModule missing

APP iModule (on tablet or smartphone):

In the Login page, you can select the application language:

- English
- Italian
- Czech
- Polish
- Russian
- Turkish
- Ukrainian

In the Login page, you can log in DEMO mode (username and password not needed), which allows to test the interface and the system features.

For Login credentials (Username e Password), refer to the technician

Diagnostic

Errors generate by the boiler board are showed through the iModule application (to decode them, please refer to boiler manual)

The iModule errors are showed below:

- E63 → internet connection loss (e.g.: no internet connection or sim credit sold out(GSM version))
Showed on mobile application and remote control where mounted
- E66 → remote control local error(e.g.: check the temperature probe)
Showed only on remote control(when mounted)
- E62 → imodule open therm communication error (e.g. cable damage or iModule fault)
Showed only on remote control (when mounted)
- E31 → boiler communication error(e.g.: boiler fault)
Showed only on remote control (when mounted)

Notification boiler and imodule errors

Errors that require a manual reset, are notified through an email containing the error code sent to the user's email and / or installer's email.

Notification failed connection

In case of iModule connection fault will be sent a notification email to the user and / or installer after the timeout is expired (default 120 minutes). This service can be disabled.

Support

For online support, please visit:

<http://www.imodule.it>

For telephone support, please call:

ITA (+39) 031 4121731