

# SmartBox Wi-Fi

ENGLISH

USB Type A  
Wi-Fi Gateway



Series: V003

## Installation Manual

- No computer required
- It manages the data collected from the various devices connected
- Each home requires at least one USB SmartBox Wi-Fi



**The device only supports Wi-Fi channels on the 2.4GHz frequency.**

APP:



Perry Cronothermostat



PERRY ELECTRIC Srl - Via Milanese, 11 - 22070 VENIANO (CO) ITALY



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## WARNINGS



The installation and electrical connection of the devices and appliances must be implemented by qualified personnel and in conformity with current laws and regulations.



Carefully read the instruction manual before using the product as it provides important guidelines regarding safety, installation and use. The instruction manual must be preserved with care for future reference.

- Ensure the product is intact once it is removed from its packaging.
- Packaging components (any plastic bags, PVC suspensions, etc.) must be kept out of reach of children.
- The SmartBox Wi-Fi is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or by those with a lack of experience and knowledge of the instructions, unless they are supervised or have received the necessary instructions concerning use of the device by a person responsible for their safety. Children should be supervised to ensure that they do not play with the device.
- If necessary, clean the SmartBox Wi-Fi with a slightly damp cloth.



**Important:** for the system modes and operation of the Wi-Fi temperature control system and for correct installation, also see the specific manual of the SmartBox Wi-Fi and of the APP.



**Radio frequency waves emitted by the SmartBox Wi-Fi are not a risk to human or animal health.**



**Important:** the manufacturer shall not, under any circumstances, be liable if the products fail to operate due to the interruption of the internet network or unavailability of these resources: Cloud, Server, Portal.



**Important:** internet access costs are charged to users according to the rates of their mobile phone provider.



**Important:** the manufacturer reserves the right to introduce any technical and/or constructive changes deemed necessary, with no prior notice.

## DISPOSAL OF ELECTRICAL & ELECTRONIC EQUIPMENT

This symbol on the product or its packaging indicates that this product shall not be treated as household waste.

Instead, it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment, such as for example:

- sales points, in case you buy a new and similar product;
- local collection points (waste collection centre, local recycling center, etc...).

By ensuring this product is disposed of correctly, you will help prevent potential negative consequence for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your house hold waste disposal service or the shop where you purchased the product.



# INSTALLATION

## Radio range warnings

During installation, some precautions must be taken in order not to limit or, in some cases, inhibit the range of the radio waves between SmartBox Wi-Fi and connected devices, in particular:

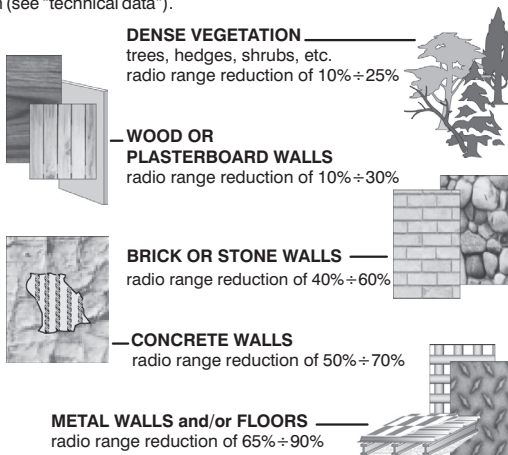
- install the appliance away from metal furniture or structures which could alter or screen propagation of radio signals;
- make sure that there are no electrical or electronic devices (television, microwave oven, etc.) within a range of at least 1 m from the appliance;
- if possible, install the device in a central position;  
if the apartment is made up of several floors, install the device on a middle floor.

Note: if there are no obstacles between devices and SmartBox Wi-Fi, the “open air” range is approximately 150 m; indoors with the presence of walls, the range is approximately 20m (see “technical data”).

Radio range decreases significantly when the components are interposed between the obstacles. This attenuation varies in different degrees depending on the type of material the walls or barriers to cross are made of.

The presence of noise or electromagnetic interference sources can also reduce the indicated radio range.

Below are some examples of mitigation related to materials, which impact on the "Free air" range declared above.



## TECHNICAL DATA

|                                       |                                              |
|---------------------------------------|----------------------------------------------|
| Power supply                          | USB type A: <b>5Vdc</b> 500mA                |
| Radio connection type                 | <b>WiFi 2.4 Ghz, 869.525MHz</b>              |
| Approximate radio range               | 150 m outdoors, 20 m indoors                 |
| Expandable up to                      | 32 devices                                   |
| Communication protocol with the nodes | Proprietary 868MHz RF communication protocol |
| Average power consumption             | 350mA                                        |
| Dimensions                            | 70x24x8mm                                    |
| Weight                                | 10g                                          |

## RF Communication Protocol Technical Data: 868MHz Version

|                          |            |
|--------------------------|------------|
| Frequency                | 869.525MHz |
| Modulation               | FSK        |
| Delta FSK                | 60kHz      |
| Output power             | <10mW      |
| Occupied Bandwidth (OBW) | 210kHz     |

## Wi-Fi Technical Data

|                            |                     |
|----------------------------|---------------------|
| Frequency                  | 2412~2484MHz        |
| Wi-Fi connection standards | IEEE 802.11b/g/n/ax |

## KEYS AND LED INDICATORS LEGEND



### LED Indications

(flashing mode)

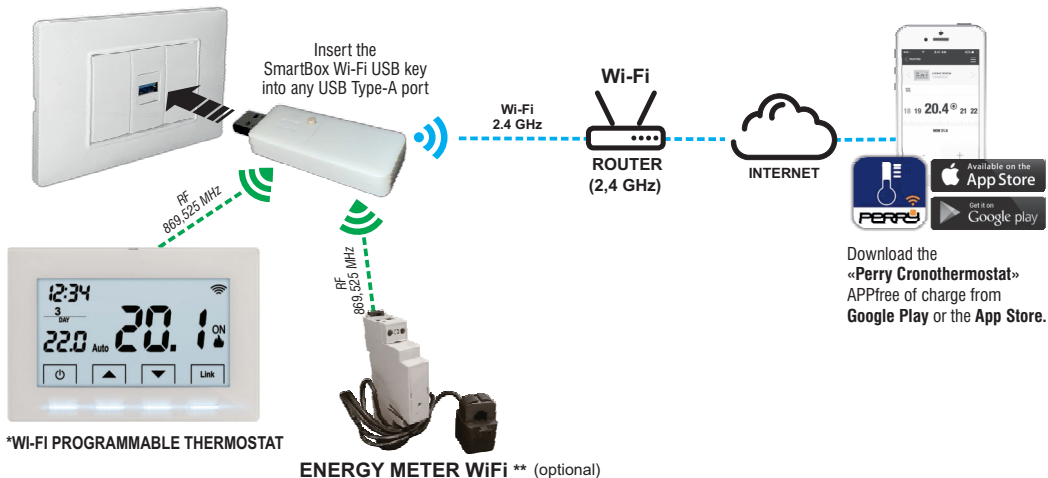
|                                                                                                       |                                                                                                        |   |                                                             |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------|
| 0.5s ON<br><br>RED  | 0.5s OFF<br><br>OFF | = | Wi-Fi network not configured                                |
| 0.5s<br><br>ORANGE  | 0.5s<br><br>RED     | = | Unable to connect to the Wi-Fi network                      |
| 4.5s<br><br>ORANGE  | 0.5s<br><br>RED     | = | Connected to the Wi-Fi network, NOT connected to the Server |
| 4.5s<br><br>ORANGE  | 0.5s<br><br>GREEN   | = | Correctly connected to Wi-Fi and Server                     |
| 1s ON<br><br>ORANGE | 1s OFF<br><br>OFF   | = | In RF detection mode                                        |

### BUTTON

Pressed for 10 seconds = RESET Wi-Fi settings  
Restore factory settings

# INSTALLATION - System Overview

 **IMPORTANT!** The device can be used via the Perry APP with a Wi-Fi network connected to an internet network.  
The device only supports Wi-Fi channels on the 2.4GHz frequency.



Download the  
«Perry Cronothermostat»  
APP free of charge from  
**Google Play** or the **App Store**.

**\*EXPANDABLE (up to 32 devices):**

- the dwelling can be divided into several thermal zones by adding other programmable thermostats (even in homes with distribution manifolds).
- it is possible to add n° 01 \*\*Energy meter (optional).

 **IMPORTANT!**  
**IMPORTANT!** The commands set via the APP may take a few minutes to be received by the thermostat depending on the internet network traffic.

# SmartBox Wi-Fi USB KEY INSTALLATION



Insert the  
SmartBox Wi-Fi USB key  
into any USB Type-A port  
5Vdc



1. Insert the **SmartBox Wi-Fi** USB key into any USB Type-A port (5Vdc power supply).
2. LED check: flashing red light indicates that the Wi-Fi network is not configured (factory default setting).
3. Register via the APP (see procedure in the APP manual).
4. Log in with your account to configure the local settings and enable **SmartBox Wi-Fi** detection; follow the instructions in the APP.

 *The router must be configured to create a dedicated 2.4GHz network in order to prevent the automatic generation of networks on different frequencies (2.4GHz and 5GHz) with the same SSID/Name.*

 *The presence of networks with duplicate SSIDs may compromise the correct connectivity of the devices.*

5. LED check:  
steady orange light, alternating with green light every 5 seconds;  
indicates that the USB dongle is correctly connected to the Wi-Fi network and the Server.  
If not, see FAQ on page 9.

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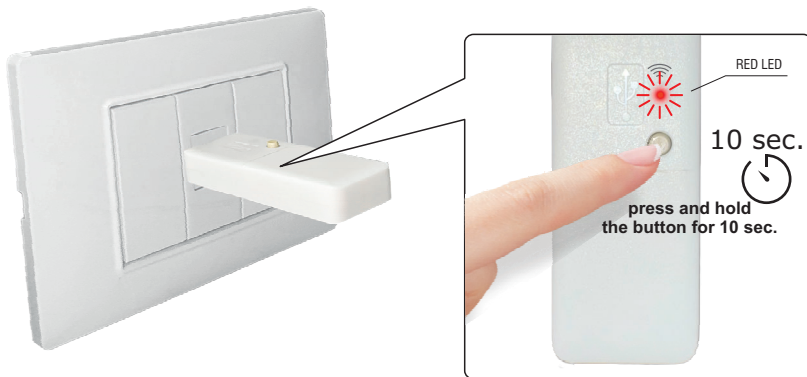
To pair SmartBox Wi-Fi with product 1TXCR028WIFI, refer to the relevant manual by scanning the QR CODE or at the following address:  
<https://www.perry.it/qrcode/1TXCR028WIFI.html>



## RESET SmartBox Wi-Fi (Factory Reset)

With the USB key inserted into a USB Type-A port press and hold the button on the dongle for 10 seconds, **until the red LED starts flashing.**

The USB **SmartBox Wi-Fi** will be unpaired from the router, restoring factory settings.





## **F.A.Q.** (frequently asked questions)

### **1) SmartBox Wi-Fi USB key does not connect**

Check that the unit is inserted into a properly powered USB Type-A port.

Once powered, check the **SmartBox Wi-Fi key LED**

**see KEYS AND LED INDICATORS LEGEND (page 5)** to determine the connection status and act accordingly.

### **2) The programmable thermostat does not connect to the SmartBox Wi-Fi:**

Make sure that the device is associated to the Smartbox, check that the association and connection symbol  appear on the LCD display of the programmable thermostat. If not (no radio signal symbol viewed), proceed with the association process as indicated in the specific installation manual of the programmable thermostat.

If the symbol  appears on the programmable thermostat display, it means that the device is associated but is not able to connect to the Smartbox.

Check that the Smartbox is switched on properly and that there are no obstacles which can limit the RF radio signal.

Note: check that the distance between the 2 devices inside the home or room does not exceed 20 m and that there are no obstacles, objects or particular walls that decrease the radio range (see programmable thermostat installation).

If the problem persists, reset the programmable thermostat and remove it from the APP.

Repeat the association of the programmable thermostat to the SmartBox Wi-Fi.



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## EU SIMPLIFIED CONFORMITY DECLARATION

The manufacturer declares that the type of radio equipment listed below complies with Directive 2014/53/EU (RED).

The full text of the EU Declaration of Conformity is available at the following Internet address:

<http://www.perry.it/it/dichiarazioni.aspx>

*Manufacturer, Fabricat, Fabrikant, Fabbricante, Fabricante:*

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*Type, Typen, Tipo:*

**1TXRX01WIFI V003**



Separate waste collection: PAPER. Check your local municipal regulations.

