

TECH CONTROLLERS

USER MANUAL EU-WiFi RS

EN

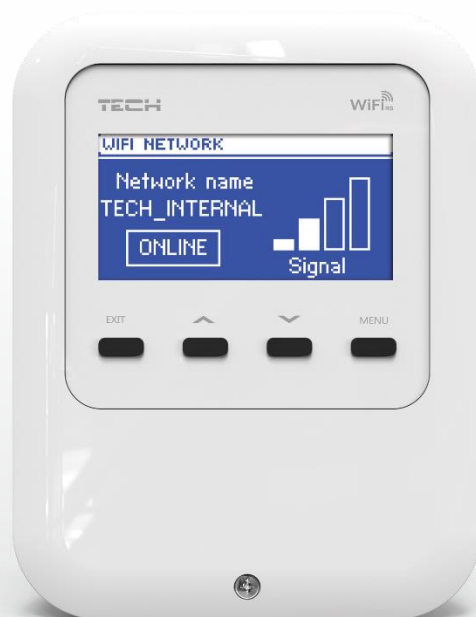


TABLE OF CONTENTS

I.	Safety.....	3
II.	Description.....	4
III.	How to install the module.....	4
IV.	First start-up	5
V.	Controlling the system online.....	5
1.	Logging in to the application or website	6
2.	Home tab	7
3.	Zones tab.....	7
4.	Statistics tab	8
VI.	Controller functions	8
1.	Registration.....	8
2.	WiFi network selection	9
3.	Network configuration.....	9
4.	Screen settings	9
5.	Language	9
6.	Factory settings	9
7.	Software update	9
8.	Service menu	9
9.	Software version	9
VII.	Technical data	10

*The pictures and diagrams are for illustration purposes only.
The manufacturer reserves the right to introduce some changes.*

I. SAFETY

Before using the device for the first time the user should read the following regulations carefully. Not obeying the rules included in this manual may lead to personal injuries or controller damage. In order to avoid accidents and errors it should be ensured that every person using the device has familiarized themselves with the principle of operation as well as security functions of the controller. If the device is to be sold or put in a different place, make sure that the user's manual is stored with the device so that any potential user has access to essential information about the device. The manufacturer does not accept responsibility for any injuries or damage resulting from negligence; therefore, users are obliged to take the necessary safety measures listed in this manual to protect their lives and property.



WARNING

- **A live electrical device!** Make sure the regulator is disconnected from the mains before performing any activities involving the power supply (plugging cables, installing the device etc.).
- The device should be installed by a qualified electrician.
- Before starting the controller, the user should measure earthing resistance of the electric motors as well as the insulation resistance of the cables.
- The regulator should not be operated by children.



WARNING

- The device may be damaged if struck by a lightning. Make sure the plug is disconnected from the power supply during storm.
- Any use other than specified by the manufacturer is forbidden.
- Before and during the heating season, the controller should be checked for condition of its cables. The user should also check if the controller is properly mounted and clean it if dusty or dirty.

Changes in the products described in the manual may have been introduced subsequent to its completion on 11.08.2022. The manufacturer retains the right to introduce changes to the design and colours. The illustrations may include additional equipment. Print technology may result in differences in the colours shown.

We are committed to protecting the environment. Manufacturing electronic devices imposes an obligation of providing for environmentally safe disposal of used electronic components and devices. Hence, we have been entered into a register kept by the Inspection for Environmental Protection. The crossed-out bin symbol on a product means that the product may not be disposed of to household waste containers. Recycling of waste helps to protect the environment. The user is obliged to transfer their used equipment to a collection point where all electric and electronic components will be recycled.



II. DESCRIPTION

EU-WiFi RS is a device which enables the user to remotely control the operation of the system via the Internet.

The possibilities of controlling the system depend on the type and software used in the main controller.

Main functions:

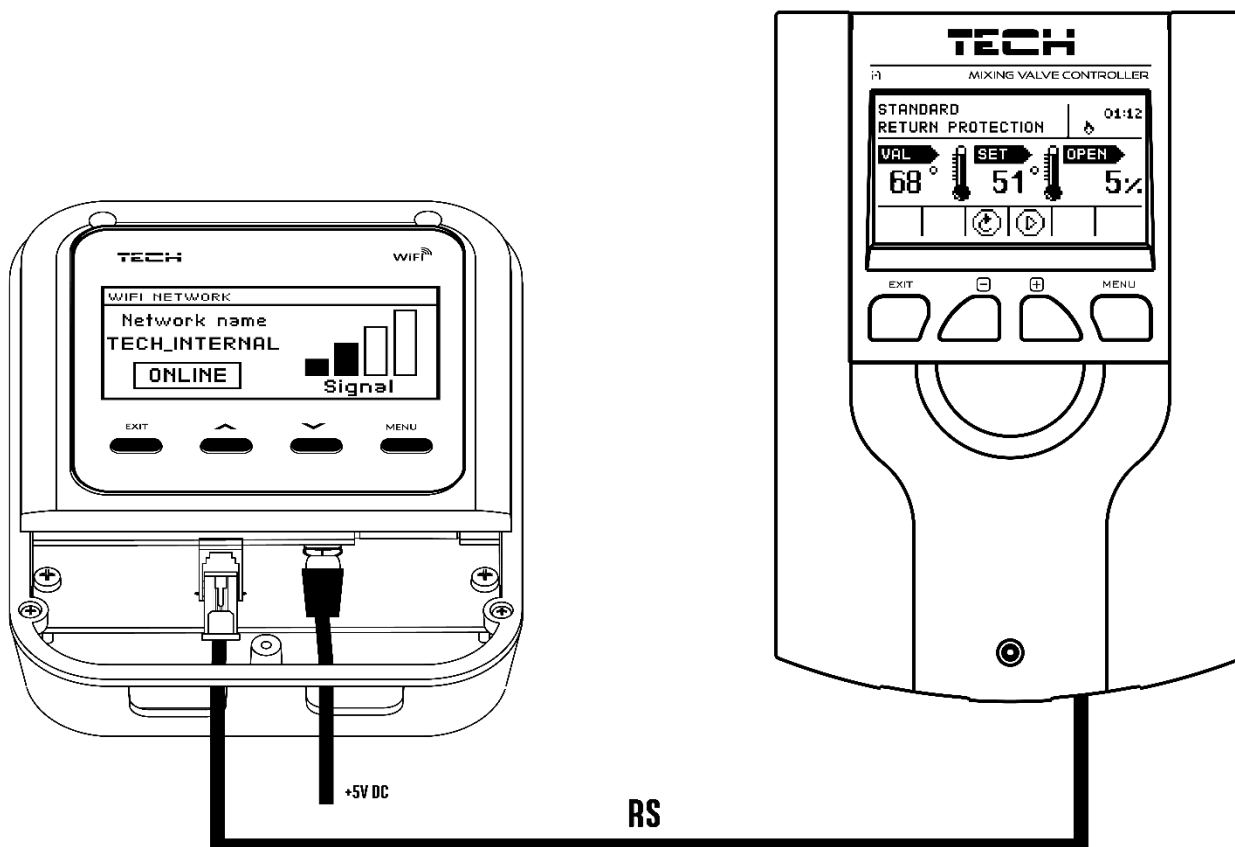
- remote control of the system online
- checking the status of particular devices comprising the system
- editing the main controller parameters
- temperature log
- event log (including alarms and parameter changes)
- controlling many modules using one administration account
- email alert notifications

III. HOW TO INSTALL THE MODULE



WARNING

The device should be installed by a qualified person.
Incorrect connection of wires may damage the module!



IV. FIRST START-UP

In order for the controller to work properly, follow these steps while starting it for the first time:

1. Connect EU-WiFi RS to the main controller using an RS cable.
2. Connect the power supply to the module.
3. Go to the module menu and select *WiFi network selection*. A list of available WiFi networks will appear - connect to one of the networks by entering the password. In order to enter the password, use the arrows and select the right characters. Press the Menu button to confirm.
4. In the main controller menu go to *Fitter's menu* → *Internet module* → *ON* and *Fitter's menu* → *Internet module* → *DHCP*.



NOTE

It is advisable to check if the internet module and the main controller have the same IP address (in the module: *Menu* → *Network configuration* → *IP address*; in the main controller: *Fitter's menu* → *Internet module* → *IP address*). If the address is the same (e.g. 192.168.1.110), the communication between the devices is correct.

Required network settings

For the Internet module to work properly, it is necessary to connect the module to the network with a DHCP server and an open port 2000.

After connecting the Internet module to the network, go to the module settings menu (in the master controller).

If the network does not have a DHCP server, the Internet module should be configured by its administrator by entering appropriate parameters (DHCP, IP address, Gateway address, Subnet mask, DNS address).

1. Go to the Internet module settings menu.
2. Select "ON".
3. Check if the "DHCP" option is selected.
4. Go to "WIFI network selection"
5. Select your WIFI network and enter the password.
6. Wait for a while (approx. 1 min) and check if an IP address has been assigned. Go to the "IP address" tab and check if the value is different from 0.0.0.0 / -.-.-.-.
 - a) If the value is still 0.0.0.0 / -.-.-.-, check the network settings or the Ethernet connection between the Internet module and the device.
7. After the IP address has been assigned, start the module registration in order to generate a code which must be assigned to the account in the application.

V. CONTROLLING THE SYSTEM ONLINE

Once the devices have been connected properly, generate the registration code. In the module menu select *Registration* or in the main controller menu go to: *Fitter's menu* → *Internet module* → *Registration*. After a while the code will appear on the screen. Enter the code in the application or at <https://emodul.eu>.

**NOTE**

The generated code is valid only for 60 minutes. If you fail to register within this time, a new code must be generated.

**NOTE**

It is advisable to use such browsers as Mozilla Firefox or Google Chrome.

**NOTE**

Using one account at emodul.eu it is possible to control a few WiFi modules.

1. LOGGING IN TO THE APPLICATION OR WEBSITE

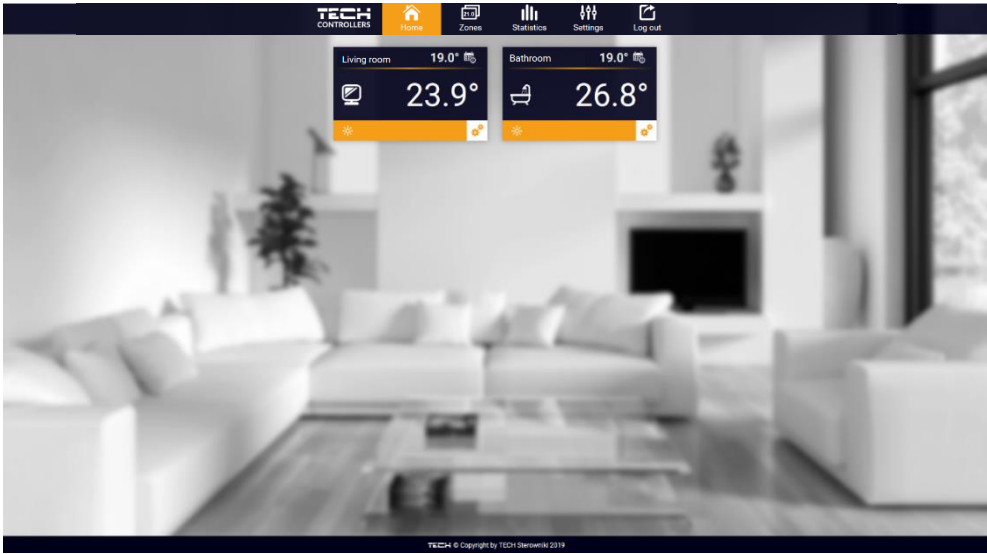
After generating the code in the controller or module, go to the application or <http://emodul.eu> and create your own account.

Once logged in, go to the *Settings* tab and enter the code. The module may be assigned a name (in the field labelled *Module description*):

Registering a new account

2. HOME TAB

Home tab displays the main screen with tiles illustrating the current status of particular heating system devices. Tap on the tile to adjust the operation parameters:

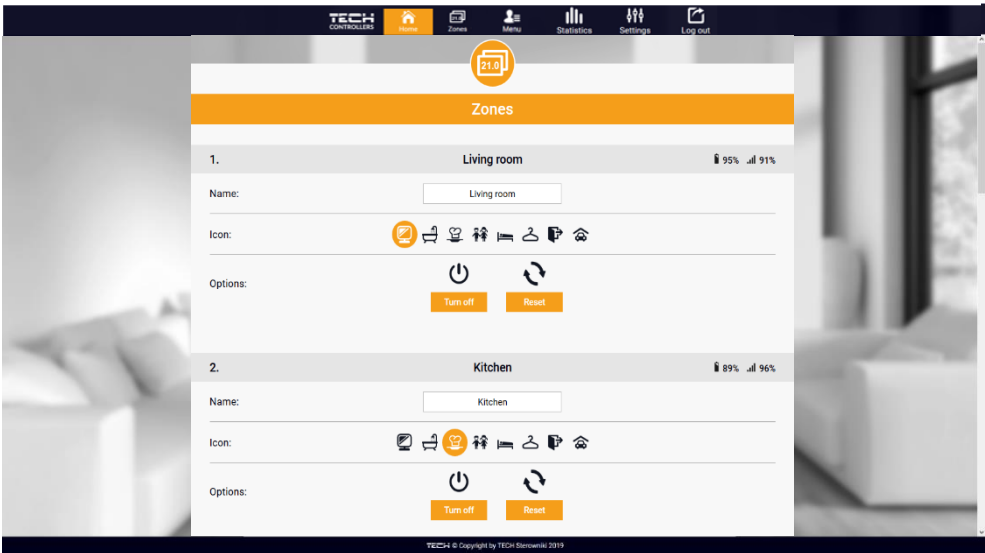


A screenshot presenting an example Home tab with tiles

The user can customize the the home page by changing the layout and order of the tiles or removing the ones which are not needed. These changes can be made in the *Settings* tab.

3. ZONES TAB

The user may customize the home page view by changing the zone names and the corresponding icons. In order to do it, go to the Zones tab.



Zones tab

4. STATISTICS TAB

The *Statistics* tab enables the user to view the temperature charts for different time periods e.g. 24h, a week or a month. It is also possible to view the statistics for the previous months.



Statistics tab

VI. CONTROLLER FUNCTIONS

BLOCK DIAGRAM - MODULE MENU

Menu

- Registration
- WiFi network selection
- Network configuration
- Screen settings
- Language
- Factory settings
- Software update
- Service menu
- Software version

1. REGISTRATION

Selecting *Registration* generates a code necessary to register EU-WIFI RS in the application or at <http://emodul.eu>. The code may also be generated in the main controller using the same function.

2. WIFI NETWORK SELECTION

This submenu offers a list of available networks. Select the network and confirm by pressing MENU. If the network is secured, it is necessary to enter the password. Use the arrows to select each character of the password and press MENU to move to the next character and confirm the password.

3. NETWORK CONFIGURATION

Normally, the network is configured automatically. The user may also conduct it manually using the following parameters of this submenu: *DHCP*, *IP address*, *Subnet mask*, *Gate address*, *DNS address* and *MAC address*.

4. SCREEN SETTINGS

The parameters available in this submenu enable the user to customize the main screen view. The user may also adjust the display contrast as well as the screen brightness. The *screen blanking* function enables the user to adjust the brightness of a blank screen. *Screen blanking time* defines the time of inactivity after which the screen goes blank.

5. LANGUAGE

This function is used to select the language version of the controller menu.

6. FACTORY SETTINGS

This function is used to restore factory settings of the controller.

7. SOFTWARE UPDATE

The function automatically detects and downloads the latest software version when available.

8. SERVICE MENU

The parameters available in the service menu should be configured only by qualified fitters and access to this menu is secured with a code.

9. SOFTWARE VERSION

This function is used to view the controller software version.

VII. TECHNICAL DATA

No	Specification	
1	Supply voltage	5V DC
2	Operating temperature	5°C - 50°C
3	Maximum power consumption	2 W
4	Connection with the controller with RS communication	RJ 12 connector
5	Transmission	IEEE 802.11 b/g/n

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EU DECLARATION OF CONFORMITY

Hereby, we declare under our sole responsibility that **EU-WiFi RS** manufactured by TECH, head-quartered in Wieprz Biała Droga 31, 34-122 Wieprz, is compliant with Directive 2014/53/EU of the European parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC (EU OJ L 153 of 22.05.2014, p.62), Directive 2009/125/EC of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (EU OJ L 2009.285.10 as amended) as well as THE REGULATION BY THE MINISTRY OF ENTREPRENEURSHIP AND TECHNOLOGY of 24 June 2019 amending the regulation concerning the essential requirements as regards the restriction of the use of certain hazardous substances in electrical and electronic equipment, implementing provisions of Directive (EU) 2017/2102 of the European Parliament and of the Council of 15 November 2017 amending Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 305, 21.11.2017, p. 8).

For compliance assessment, harmonized standards were used:

PN-EN 62368-1:2020-11 par. 3.1a Safety of use
 PN-EN IEC 62479:2011 art. 3.1a Safety of use
 ETSI EN 301 489-17 V3.2.4 (2020-09) par.3.1b Electromagnetic compatibility
 ETSI EN 301 489-1 V2.2.3 (2019-11) par.3.1b Electromagnetic compatibility
 ETSI EN 301 489-3 V2.1.1:2019-03 par.3.1 b Electromagnetic compatibility,
 ETSI EN 300 328 V2.2.2 (2019-07) par.3.2 Effective and coherent use of radio spectrum.

Wieprz **11.08.2022**


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