SALUS CONTROLS | QUANTUM

SQ610RF | SMART THERMOSTAT

SALUS SMART HOME READY

WIRELESS CONTROL

LI-ION

RECHARGEABLE BATTERY

COMFORT OF A WARM FLOOR

EASY INSTALLATION

MULTIFUNCTIONALITY

HUMIDITY SENSOR

Introduction

The SQ610RF Quantum is a ZigBee temperature controller for wireless control of iT600 series devices, such as the KL08RF wiring centre, mini TRV head, RX10RF boiler control module.
In order to control SQ610RF over the Internet or via the SALUS Smart Home mobile app **(ONLINE mode)**, it must be installed together with the UGE600 Internet gateway (sold separately). From the application level, it is possible to pair SQ610RF with other system elements, e.g. Smart Plug SPE600, Smart Relay SR600 or window/door sensor OS600/SW600.
SQ610RF can be used locally without an Internet connection **(OFFLINE mode)**, however, it's communication with other devices must be done using the CO10RF coordinator (sold separately).

Full manual in PDF format is available at www.salus-controls.eu site.

Product Compliance

This product complies with the essential requirements and other relevant provisions of Directives 2014/30/ EU, 2014/35/EU, 2014/53/EU and 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following internet address: www.saluslegal.com.

Safety Information

Use in accordance to national and EU regulations. Use the device as intended, keeping it in dry condition. Product for indoor use only. Installation must be carried out by a qualified person in accordance to national and EU regulations. Disconnect your equipment before cleaning it with a dry cloth.

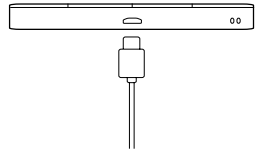
Package Content:

1) SQ610RF Quantum Thermostat
2) Wall mounting plate
3) Self-adhesive mounting tape
4) Mounting screws
5) Manual instruction

Before you start:

1. New SQ610RF Quantum Thermostat is partially charged, however, we recommend you to fully charge the battery before use.

   Connect charger to micro-USB Port which is at the bottom of SQ610RF Quantum Thermostat to charge the device.



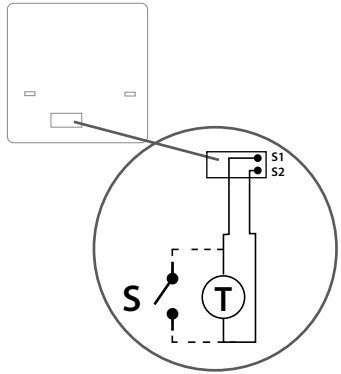
Charging to full battery level may take up to 24h maximum.

3. Mounting: to mount thermostat you can use included accesories (mounting screws or self-adhesive tape). Remove back cover to mount the plate to the wall. After this just attach thermostat to the plate (it has built-in magnet).

Please note:

The ideal position to thermostat mounting is about 1,5m under floor level far from heating or cooling sources. Thermostat can't be exposed to sunlight or any extreme conditions like for example draft.

2 Wiring diagram (S1, S2 Input)

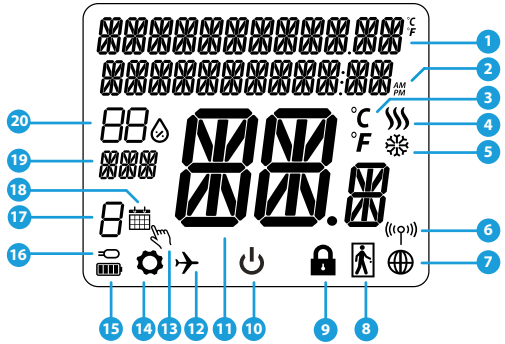


Symbols explanation:

S – volt-free contact
T – temperature sensor

S1,S2 Terminals:
- air or floor temperature sensor
- external volt-free contact to connect any ON/OFF switch or occupancy sensor (Hotel card)

LCD Icon Description



1. Menu/Settings description + Clock
2. AM/PM
3. Temperature unit
4. Heating indicator (icon is animating when there is heating demand)
5. Cooling indicator (icon is animating when there is cooling demand)
6. RF Connection indicator
7. Internet connection indicator
8. Occupancy sensor (hotel card)
9. Key lock function
10. Standby mode icon
11. Current Temperature / Setpoint Temperature
12. Holiday mode
13. Temporary override mode
14. Settings icon
15. Baterry status indicator
16. External / Floor temp sensor indicator
17. Schedule program number
18. Schedule mode icon
19. Day indicator/ SET information
20. Current Humidity value

Buttons Description

Button	Function
☰	1) Menu button / Return button. 2) In the MAIN SCREEN: Press and hold for 3 sec to change the thermostat operating mode (Schedule mode / Permanent mode / Temporary override mode). 3) In the SETTINGS SCREEN: Press and hold for 3 sec to go back without saving the changes. 4) In the PAIRING SCREEN (in SYSTEM TYPE Menu): Press and hold for 3 sec to see other pairing options.
﹀	„Down" Button (Decrease parameter value/moving on the menu in 'DOWN' direction)
﹀	"Up" Button (Increase parameter value/moving on the menu in 'UP' direction)
✓ ⏻	1) Press and hold for 3 seconds to POWER UP new device 2) "OK / Tick" Button (Confirm parameter value / Go to the next menu / Save settings) 3) In the MAIN SCREEN: Press and hold for 3 seconds to enter Standby mode 4) In the SETTINGS SCREEN: Press and hold for 3 sec to go back to the MAIN SCREEN & SAVE all the changes. 5) During PAIRING process – hold button for 3 seconds to POWER OFF or REBOOT the thermostat.
﹀ + ﹀	In the MAIN SCREEN - press and hold these buttons together for 3 seconds to LOCK / UNLOCK the Thermostat keys).

English
Deutsch
Français
Nederlands

COMPATIBILTY WITH OTHER SALUS CONTROLS DEVICES

Quantum Thermostat can work in ONLINE or OFFLINE mode.
At first step you need to decide in which mode your thermostat will work.

ONLINE MODE

Universal Gateway is CONNECTED TO THE INTERNET
You can configure and use all your devices in the Smart Home App

Download the Smart Home App on your iOS or Android device for remote access to your SALUS equipment.

SALUS Smart Home

GET IT ON Google Play

Download on the App Store

OFFLINE MODE

Universal Gateway is NOT CONNECTED TO THE INTERNET
You can use your devices locally without the SmartHome App. Gateway works in this mode as standard ZigBee coordinator.

OR

C010RF Coordinator - You can use standard ZigBee network coordinator to install and use your devices.

Compatibile devices:

SR600* Smart Relay

SPE600* Smart Plug

*Only with Online Mode

KL08RF Wiring Centre for 8-zone underfloor heating (UFH).

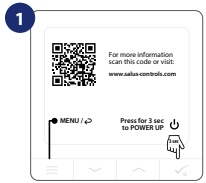
TRV (Thermostatic Radiator Valve) with wireless communication.

RX10RF receiver

First power up sequence

Please note:

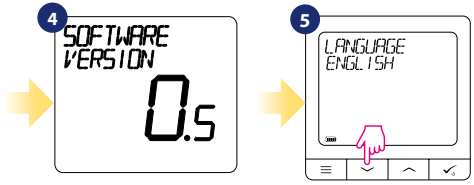
For easier installation, please make sure you have already added other devices to your ZigBee network, such as Underfloor Heating Control Box (KL08RF) or Radiator heads (TRV's) etc.



Remove the protection foil

To power on the Thermostat hold ✓ button for 3 seconds...

...display will show all icons...



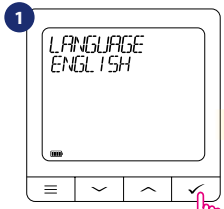
...then thermostat will display the software version.

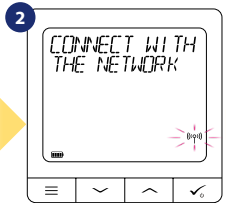
Now, choose your language by „˅" or „˄" buttons. Confirm your language by ✓ button.

English
Deutsch
Français
Nederlands

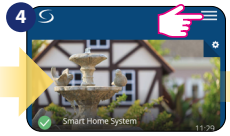
Installation in ONLINE mode

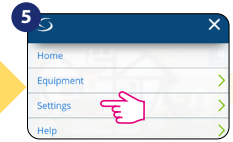
After Language selection follow below steps to add your device to the Smart Home app and pair with other devices:

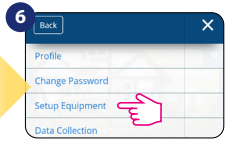


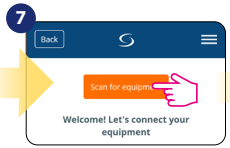


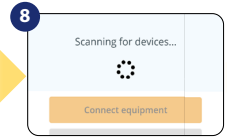
Go to SALUS Smart Home app



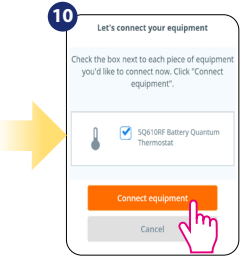


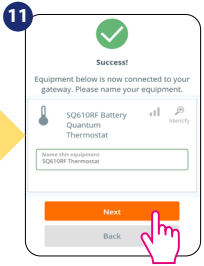


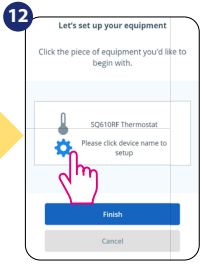


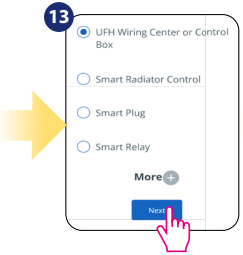


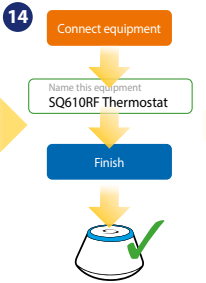
Once your thermostat is added to the app you will see above screen on the LCD.

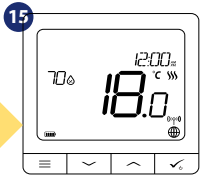










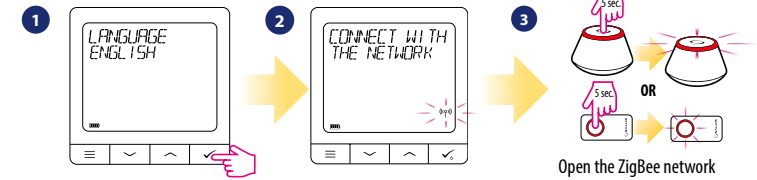


After that thermostat will display main screen.
Congratulations! You succesfully configured SQ610RF Quantum Thermostat.

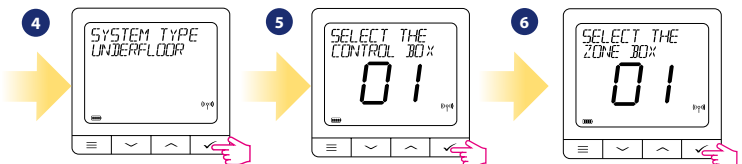
English
Deutsch
Français
Nederlands

Installation in OFFLINE mode

Pairing with Wiring Centre / Control Box (Install the Wiring Centre / Control Box according to the instructions included with product)



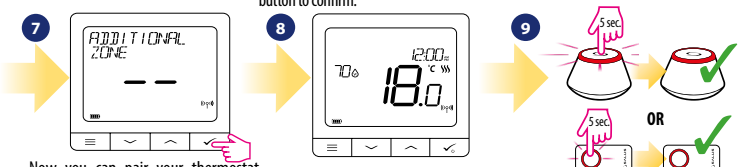
Open the ZigBee network



Select system type: UNDERFLOOR, press ✓ button to confirm.

Using ﹀ and ﹀ buttons select the Control Box number (press PAIR button on the Control Box to see its address number). Press ✓ button to confirm.

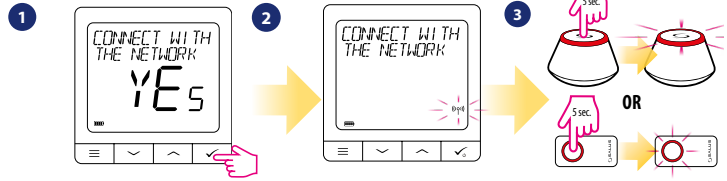
Use ﹀ or ﹀ buttons to select the zone number and press ✓ button to confirm.



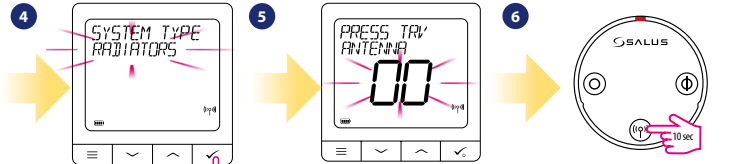
Now you can pair your thermostat with additional zones. Select one more zone or finish the pairing process by ✓ button.

Close the ZigBee network

Pairing with TRV radiator head (Install the TRV according to the instructions included with product)



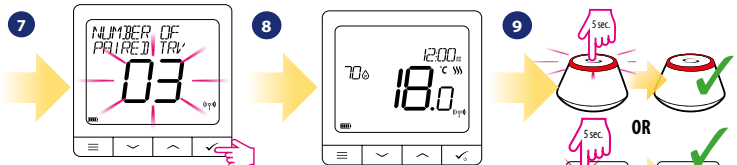
Open the ZigBee network



Select system type: RADIATORS

Now hold antenna button for 10 sec. on all TRV's which you want to pair with your Termostat.

You can pair up to 6 TRV's with 1 Thermostat. All TRV's have to within the same room with Thermostat.



On the LCD you will see the number of paired TRV's. Once all TRV's are paired - press ✓ button to finish the pairing process.

Close the ZigBee network

SQ610RF Full menu structure

Main menu

- **Schedule settings**
  - DISABLE
  - MO-FR+SA-SU
  - MO-SU
  - SINGLE DAYS
- **User settings**
  - TIME/DATE
  - HOLIDAY MODE
  - THERMOSTAT CALIBRATION
  - SHOW/HIDE DISPLAY HUMIDITY
  - SHOW/HIDE DISPLAY FLOOR
  - STANDBY TEMP SETPOINT
  - HEAT/COOL
  - RESET USER SETTINGS
- **Admin settings**
  - TEMPERATURE SCALE
  - DISPLAY TEMPERATURE RESOLUTION [1.]
  - HEAT CONTROL ALGORITHM [2.]
  - COOL CONTROL ALGORITHM
  - S1/S2 INPUT [3.]
  - MINIMUM SETPOINT
  - MAXIMUM SETPOINT
  - VALVE PROTECTION [4.]
  - MINIMUM TURN OFF TIME [5.]
  - OPTIMISATION FEATURE [6.]
  - COMFORT WARM FLOOR [7.]
  - PIN CODE
  - DEVICE INFORMATION [8.]
  - FACTORY RESET [9.]
- **Language**
  - ENGLISH
  - DANISH
  - POLISH
  - ...

Short description of some selected functions (all functions are described in the full version of the SQ610RF manual):

1. DISPLAY TEMP RESOLUTION: This function determines the resolution of the displayed temperature - User can temperature set by steps (every 0,5°C or 0,1°C).

2. CONTROL ALGORITHM: This function defines how to control the room temperature. Available options are: ITLC for Underfloor Heating / Radiators / Electrical Heating (that's advanced algorithm for precise maintenance of room temperature), hysteresis +/-0.5°C or +/-0.25°C, THB Actuator (option recommended for systems with THB auto balancing actuators).

3. S1/S2 INPUT: A floor sensor, an external temperature sensor or an occupancy sensor can be connected to the S1/S2 input of SQ610RF. Additionally, by connecting a NO type of ON/OFF voltage-free contact, you can use this input as a OneTouch rules trigger (programmed in the Salus Smart Home app) or as a Heat/Cool changeover.

4. VALVE PROTECTION: This function activates all actuators once a week for 5 minutes (in summer, this function helps to prevent the actuators stuck).

5. MIN TURN OFF TIME: Minimum switch-off time (thermostat will not send the signal for heating/cooling more often than specified in this parameter).

6. OPTIMISATION FEATURE: Optimum Start and Optimum Stop functions are energy saving feature that makes thermostat most cost effective (in combination with ITLC control algorithm).

7. COMFORT WARM FLOOR: This function helps to keep the floor warm, even if the room is warm enough and there is no need to turn on the heating. User can select 3 levels of warm floor feature. Please note it is not an economy feature, as your heating system may be ON even if there is no heating demand from the room thermostat. It is COMFORT feature which keeps your floor warm all the time.

8. DEVICE INFORMATION: In this menu user can check: Software Version, Battery Level, RF range value, Paired devices or also user can activate Identification mode.

9. FACTORY RESET: Here you can RESET your device to factory settings. After successfull reset device will be removed from ZigBee network and you will need to add / pair your device again.

English

QUANTUM SQ610RF	
Power Supply	Built-in Li-Ion 3,7V Battery
Charging voltage (no charger included)	Micro-USB 5V DC, min 0,5 A
Temperature range	5-40°C
Display temperature accuracy	0.5°C or 0.1°C
Control algorithm	ITLC SPAN (±0.25°C / ±0.5°C) THB
S1-S2 Input (multifunctional input)	Floor temperature Air temperature Occupancy sensor One Touch Changeover (heating/cooling)
Communication protocol	ZigBee 2,4GHz
Mounting	Surface mounting
Working temperature	0-45°C
IP protection class	IP30
Dimensions (Width x Height x Deep)	86 x 86 x 11 mm