Wiser Radiator Thermostat

Device user guide

Information about features and functionality of the device.

11/2022



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Table of Contents

Safety information	4
Wiser Radiator Thermostat	5
For your safety	5
About the device	5
Installing the device	6
Pairing the device	6
Pairing device manually	6
Pairing device with auto scan	8
Configuring the device	8
Changing the device icon	8
Renaming the device	9
Changing the device location	9
Removing the device	10
Resetting the device	10
Using the device	11
Individual thermostat visibility in home page	12
Setting the room temperature manually	12
Setting the room temperature using app	14
Using the boost mode	15
Checking the device history	16
Creating a schedule	17
Activating the child Lock	18
Creating a moment	19
Creating an automation	20
Replacing the batteries	25
LED indications	25
Troubleshooting	26
Technical data	28
Compliance	29
Compliance information for Green Premium products	29
Trademarks	29

Safety information

Important information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that accompany this symbol to avoid possible injury or death.

AADANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

Failure to follow these instructions will result in death or serious injury.

AWARNING

WARNING indicates a hazardous situation which, if not avoided, **could result** in death or serious injury.

ACAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Wiser Radiator Thermostat



CCTFR6100Z3

For your safety

NOTICE

RISK OF DAMAGE TO DEVICE

- Make sure that the O-ring is seated firmly on the thread.
- The ring nut should be tightened by hand, do not use any tools. Do not tighten too hard.

Failure to follow these instructions can result in equipment damage.

About the device

The Wiser Radiator Thermostat (hereinafter referred to as **Thermostat**) uses integrated temperature sensors to control the flow of water through a radiator, thereby regulating the temperature in a room. The target temperature and the switching times are set in the Wiser app.

Personalize your home heating by adding a Thermostat to your Wiser system. This provides an effortless control to set different schedules and temperatures in different rooms, and upgrading to room-to-room heating control could save 18% on energy usage. Thermostats provide ultimate comfort, convenience and practicality.

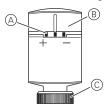
Intended use:

- Individual room control
- Mobile control anytime, anywhere with the Wiser app
- · Boost mode for ease and comfort
- · Temperature drop function.

EXAMPLE: If the window is open and temperature drops rapidly, then the Thermostats turns Off.

Diagram of operating elements

- A. 3 status LEDs
- B. Twistable cap
- C. Chrome ring nut



Installing the device

Refer to the installation instruction supplied with this product. See Wiser Radiator Thermostat.

Pairing the device

Using the Wiser app, first pair your device with the **Gateway/Hub** to access and control the device. You can either add the device manually or do an auto-scan to pair it.

Pairing device manually

6

To pair the device manually:

NOTE: Remember to insert the batteries to power on the device.

- 1. On the Home page, tap +.
- 2. Tap and select the required **Wiser Hub** on the slide-up menu.
- 3. Select an option to add the device (A):
 - Add Device with Install Code
 - Add Device without Install Code



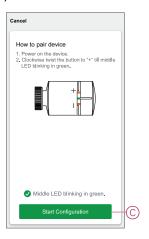
TIP: It is highly recommended to add the device with install code.

- 4. To pair the device with install code, tap **Add Device with Install Code** to display the slide-up menu. Select any one of the options (B):
 - Scan Install Code you can scan the device for the install code
 - Enter Install Code Manually you can manually enter the install code from the device

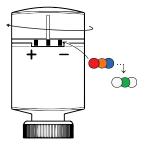
After pairing the device with install code, proceed to Step 6.



- 5. To pair the device without install code, tap Add Device without Install Code.
- 6. Turn and hold the cap in the "+" direction for a few seconds. The middle LED blinks green.
- 7. In the app, select **Middle LED blinking in green** and tap **Start configuration** (C).



8. After a few seconds, a solid green LED indicates that the device is successfully paired to the **Gateway/Hub**.



9. After the device is added in the app, tap **Done**.

NOTE:

- Before you tap Done, you can select the room to assign the Thermostats. This creates a group to control the Thermostats, refer to Using the device, page 11.
- Refer to Changing the device location to assign a room to the Thermostat, if you did not assign the room at **Step 9**.

Pairing device with auto scan

Pairing the device with auto scan automatically discovers the device when the corresponding device is powered on. To pair the device:

NOTE: Remember to insert the batteries to power on the device.

- 1. On the **Home** page, tap +.
- 2. Tap Auto scan and tap Confirm.
- 3. If you have multiple gateways, do Step 4 or proceed to Step 5.
- 4. Tap Select hub and select the Wiser hub from the slide-up menu.
- Turn and hold the cap in the "+" direction for a few seconds.
 NOTE: Please wait for a few seconds until the device search is complete.
- 6. Tap Next (A) and select iTRV.



7. Once the device is added successfully, tap **Done**.

Configuring the device

Changing the device icon

You can change the device icon using the Wiser app.

- 1. On the **Home** page, select the device for which you wish to change the icon.
- 2. At the top-right corner of the screen, tap .
- 3. Tap edit ___ next to the device name.
- 4. Tap **Icon** to view the menu.

- 5. In the slide-up menu, select any one of the following (A) to change the device icon:
 - Take photo allows you to click a photo from the mobile camera.
 - Select from Icon Library allows you to select an icon from the app library.
 - Select from Album allows you to select a photo from the mobile gallery.



Renaming the device

You can rename the device using the Wiser app.

- 1. On the **Home** page, select the device for which you wish to rename.
- 2. At the top-right corner of the screen, tap ...
- 3. Tap edit ___ next to the device name.
- 4. Tap Name, enter the new name (A) and then tap Save.

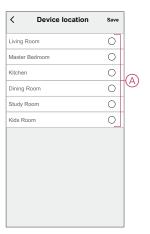


Changing the device location

You can change the device location using the Wiser app.

- On the **Home** page, select the device for which you wish to change the location.
- 2. At the top-right corner of the screen, tap .

- 3. Tap edit ___ next to the device name.
- 4. Tap Location.
- 5. Select the desired location from the list (A) and then tap Save.



Removing the device

Using the Wiser app, you can remove a device from the device list. To remove a device:

NOTE: You can only remove the device by accessing each Thermostat control page.

- 1. On the **Home** page, tap **All devices** > **iTRV**.
- 2. Tap of to display more details.
- 3. Tap Remove and Factory Reset Device (A) and tap OK.



 $\mbox{\bf TIP:}$ On the $\mbox{\bf Home}$ page, tap and hold the $\mbox{\bf iTRV}$ to remove the device.

NOTE: By removing the device, you will reset the device. If you still have a problem with the reset, then refer to reset the device, page 10.

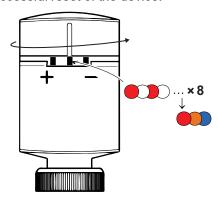
Resetting the device

You can reset the device to factory default manually while it is attached to the radiator body.

To reset the device:

1. Turn and hold the cap in the "-" direction.

- 2. Wait a few seconds until the center LED begins to flash Red.
- 3. Continue holding the cap in "-" direction until LED flashes Red 8 times.
- 4. Release the cap; all 3 LEDs will flash red-orange-blue once indicating successful reset of the device.



Using the device

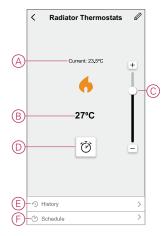
When a Thermostat is commissioned and assigned to a room, a group is automatically created with all the Thermostats from the same room. This group is called as Radiator Thermostats in the home page. This grouping is to save heating costs and to avoid Thermostats working against each other in a room.

NOTE: The individual Thermostats will not appear on the home page by default. To change this setting, refer to Individual Thermostat visibility on home page, page 12.

Group Thermostat control panel

On the group Thermostat control panel page, you can see the following:

- The current temperature value (A)
- The setpoint temperature value (B)
- The sliding bar to adjust the temperature (C)
- Boost mode, page 15 (D)
- History, page 16 (E)
- Schedule, page 17 (F)

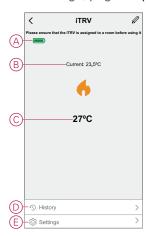


Individual Thermostat control panel

On the individual Thermostat control panel page, you can see the following:

NOTE: This control panel will not have the slider bar as you cannot control the temperature of the Thermostats individually. To adjust the setpoint, check the Group Thermostat control panel.

- · Battery (A)
- The current temperature value (B)
- The setpoint temperature value (C)
- History, page 16 (D)
- Settings, page 18 (E)

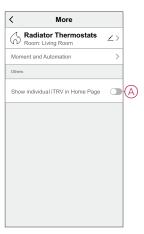


Individual thermostat visibility in home page

The individual Thermostats will not appear on the home page by default. Using the app, you can change the default settings to adjust the visibility according to your preferences.

To change the settings:

- 1. On the **Home** page, tap **All devices > Radiator Thermostats**.
- 2. Tap of to display more details.
- 3. Tap the toggle switch (A) to turn on the **Show individual iTRV in Home Page** option.



Setting the room temperature manually

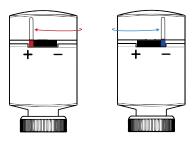
The room temperature can be increased/decreased manually by turning the cap of the thermostat.

Turn the thermostat cap:

- In the "+" direction to increase the temperature setpoint. The red LED will light up for 5 seconds.
- In the "-" direction to lower the temperature setpoint. The blue LED will light up for 5 seconds.

When the thermostat cap is turned, the setpoint temperature is increased/ decreased by 2 $^{\circ}$ C from the current room temperature setpoint. The boost is active for 1 hour.

NOTE: If the setpoint temperature is already more than 2 °C above or below the room temperature, a boost will not change the setpoint temperature.



Setting the room temperature using app

By using the Wiser app, the room temperature can be increased/decreased.

NOTE: You can only adjust the room temperature through the control panel of the group Thermostat.

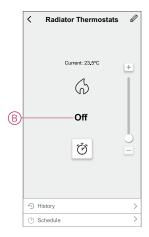
- 1. On the **Home** page, tap **All devices** > **Radiator Thermostats**.
- 2. On the control panel page, you can do either of the following to adjust the temperature (A):
 - Tap "+" or "-" sign to increase/decrease the temperature setpoint.
 - Drag the sliding bar up/down to increase/decrease the temperature setpoint.



3. If you drag the sliding bar to bottom position, the control panel page will display the device as OFF (B), but the device will operate with a setpoint of 4 $^\circ$ C.

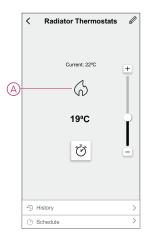
NOTE:

- The iTRV setpoint temperature ranges from 4 °C to 30 °C.
- Each "+/-" tapping will increase or decrease the setpoint temperature by 0.5 °C.



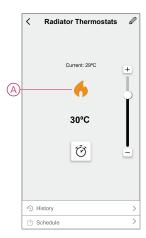
When the current temperature is higher than setpoint

When the current temperature value is equal to or higher than the setpoint, the flame icon on the control panel page will be displayed in grey state (A).



When the setpoint is higher than current temperature

When the setpoint (max 30 °C) is higher than the current temperature value, the flame icon on the control panel page will be displayed in highlighted state (A).



Using the boost mode

Using the boost mode, the setpoint is increased by 2 °C from the current room temperature.

Tto use the boost mode:

- 1. On the Home page, tap All devices > Radiator Thermostat.
- 2. On the device control panel page, select the
- 3. In the slide-up menu, select the **Boost Duration** (A) and tap **Confirm**.

NOTE:

- The boost duration is set to 1 hour by default.
- · The sliding bar can be used during the boost mode.
- The boost mode will stop automatically when the boost duration is completed.
- If the current temperature is 28.5 °C 29.5 °C, then the boost mode will set the temperature to the maximum (30 °C) temperature.

- 4. To turn off the boost mode manually, go back to the control panel page and tap .
- 5. In the slide-up menu, tap Off (B) and tap Confirm.

NOTE: The Boost mode will be turned off if you manually adjust the device's setpoint or change the temperature through the app's sliding bar below the current temperature.



Schedule actions within boost period

If the boost mode is turned on and in this period if there are one or more scheduled actions, the system stops the schedule action temporarily and only performs the boost operation until the boost duration is completed.

To view the temperature changes during the boost operation, go to Checking the device history, page 16.

Below is an example of the temperature changes during the boost duration:



Checking the device history

16

Using the Wiser app, you can monitor the temperature changes by accessing the device history.

To see the device history of the group Thermostats:

- 1. On the **Home** page, tap **All devices** > **Radiator Thermostats**.
- 2. On the device control panel page, tap History.

3. In the **History** page, you can see the temperature changes in Day (A), Week (B), Month (C), or Year (D) view.

NOTE: You can adjust the date, week, month, or year using the panel (E). Alternatively, navigate to **Home > All devices > iTRV > History** to check the device history of the individual Thermostats.

Creating a schedule

The heating system is fully controlled and triggered by your schedule. Once the schedule is set, your system will follow the active schedule. You can create or modify the schedules at any time.

To create a schedule:

Days of Month

- 1. On the Home page, tap All devices > Radiator Thermostats.
- 2. Tap Schedule > Add Schedule to add a schedule.
- 3. Set the time (A).
- 4. Tap Repeat (B), select the days you want to set the schedule.
- 5. Tap **Note** (C), enter the note and tap **Confirm**.
- 6. Tap the toggle switch (D) to turn on the **Notification** for the schedule. The app will send a notification that the scheduled task is executed at the time of schedule.
- 7. In the **Radiator Thermostats** section, you can adjust the temperature (E) for the scheduled time.

8. Tap Save.



Activating the child Lock

The Child Lock helps to prevent children from operating the Thermostats. When the child lock is turned on, the Thermostats can be operated only using the app, but not manually. To access the child lock feature, you must first enable the individual Thermostat visibility in the Home page, page 12.

To turn on the Child Lock settings:

TIP: By turning on the child lock, the Thermostat does not turn off, it remains in its current state.

- 1. On the **Home** page, tap **All devices** > **iTRV**.
- 2. Tap Settings.
- 3. Tap the toggle switch (A) to turn on the Child Lock settings.



Creating a moment

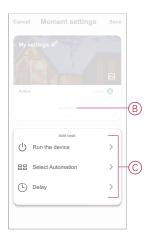
Moment allows you to group multiple actions that are usually done together. Using the Wiser app, you can create moments based on your needs. To create a moment:

- 1. On the **Home** page, tap
- 2. Go to **Moment** > + to create a moment.
- Tap Edit name, enter the name of the moment (A) and tap Save.
 TIP: You can choose the cover image that represents your moment by tapping .

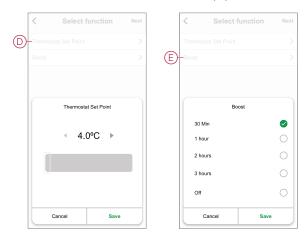


- 4. In the Action section, tap Add task (B) to display the slide-up menu.
- 5. In the **Add task** menu, you can do either or all of the following actions (C):
 - Run the device Select the devices that you want in a moment.
 - Select Automation Select the automation that you want to enable or disable. For more info refer to Automation.
 - **Delay** Set the delay time.

NOTE: You can add one or more actions using •



- 6. Tap Run the device > Radiator Thermostats select either or both of the functions to add in the moment:
 - Thermostat setpoint Adjust the thermostat temperature (D).
 - Boost Set the boost duration (E).



7. Once all the actions are set, tap Save.

Editing a moment

To edit a moment:

- 1. On the **Moment** tab, locate the moment you want to edit and tap •••.
- 2. On the **Edit** page, you can tap each item (such as dimmer, shutter, delay, temperature, etc.) to change the settings.

TIP:

- You can add one or more actions using lacktriangle
- To delete an existing action, slide the each item towards left and tap Delete.

Deleting a moment

To delete a moment:

- On the Moment tab, locate the moment that you want to delete and then tap
- 2. Tap **Delete** and tap **Ok**.

NOTE: After deleting a moment, the device action can no longer be triggered.

Creating an automation

Automation allows you to group multiple actions that are usually done together, triggered automatically or at scheduled times. By using the Wiser app, you can create automations based on your needs.

To create an automation:

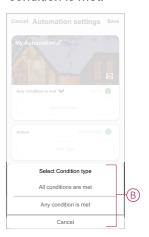
- 1. On the **Home** page, tap the
- 2. Go to **Automation** > + to create an automation.

3. Tap **Edit name**, enter the name of the automation (A) and tap **Save**.

TIP: You can choose the cover image that represents your automation by tapping .



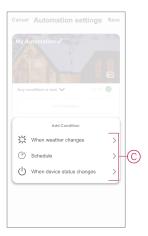
- 4. Tap Any condition is met to select any one of the condition type (B):
 - All conditions are met The automation is triggered when all the conditions are met.
 - Any condition is met The automation is triggered when at least one condition is met.



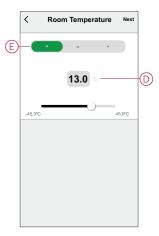
5. Tap **Add Condition** to display the slide-up menu.

- 6. In the **Add Condition** menu, you can do either or all of the following options (C):
 - When weather changes Select the various weather settings.
 - Schedule Set the time and day.
 - When device status changes Select the device and it's function.

Note: You can add one or more conditions using •.



7. Tap When device status changes > Radiator Thermostats > Room temperature and set the temperature (D) and the condition (E).



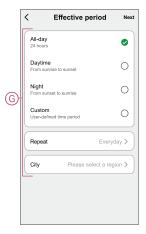
8. Tap Add task to open the slide-up menu.

- 9. In the Add task menu, you can do either or all of the following options (F):
 - Run the device Select the devices that you want to trigger
 - Moment or Automation Select the moment which you want to trigger or select the automation that you want to enable or disable
 - Send notification Turn On notification for the automation
 - Delay Set the delay time

NOTE: You can add one or more actions using .



- 10. Tap on Effective period to set the time range for the automation. You can select any one of the following (G):
 - All-day 24 hours
 - Daytime From sunrise to sunset
 - Night From sunset to sunrise
 - Custom User defined time period



11. Once all the actions and conditions are set, tap Save.

Once the automation is saved, it is visible on the **Automation** tab. You can tap the toggle switch on the automation to enable it.

Example of an automation

This demonstration shows you how to create an automation to turn on the Thermostat setpoint to 20 °C when the outdoor temperature is less than 0 °C.

- 1. Go to **Automation** > + to create an automation.
- 2. Tap **Edit name**, enter the name of the automation and tap **Save**.

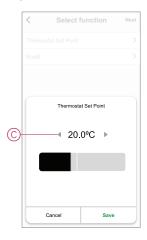
TIP: You can choose the cover image that represents your automation by tapping .

- 3. Tap Add Condition > When weather changes > Outdoor Temperature.
- 4. Select the outdoor temperature value (A), the condition (B) and tap Next.

TIP: You can set the outdoor temperature value as 0 °C and the condition as < (less than).



- 5. Tap Add task > Run the device and select Radiator Thermostats.
- 6. Tap Thermostat Set Point and set the temperature as 20 °C (C).



7. In the **Automation Settings** page, tap **Save**.

Once the automation is saved, it is visible on the **Automation** tab. You can tap the toggle switch on the automation to enable it.

Editing an automation

To edit an automation:

- 1. On the Automation tab, locate the automation you want to edit and tap •••.
- 2. On the **Edit** page, you can tap each item (such as dimmer, shutter, delay, temperature, etc.) to change the settings.

TIP:

- You can add one or more actions using
- To delete an existing condition or action, slide each item towards left and tap **Delete**.

Deleting an automation

To delete an automation:

- 1. On the **Automation** tab, locate the automation that you want to delete and then tap •••.
- 2. Tap **Delete** and tap **Ok**.

NOTE: After deleting an automation, the device action can no longer be triggered.

Replacing the batteries

Replace the batteries when the battery is low or critically low. The center LED of the thermostat will signal when the batteries need to be replaced.

+ LED	Centre LED	- LED	Meaning
Off	Solid Red, for 1s, once per hour.	Off	Battery, low. Replace. NOTE: This sends notification to the app.
Off	Flashes Red, for 5s, once per minute.	Off	Batteries critically low. Replace immediately. NOTE: This sends notification to the app.

Replace the batteries with 2*1.5V IEC LR6 (AA) alkaline batteries. Check the batteries ("+" and "-" ends) are correctly oriented. The polarity is indicated on the device's terminals.

NOTE: Used batteries should be disposed of according to statutory regulations. They must be recycled properly which help to protect the environment and reduce the waste of precious resources.



LED indications

Normal use

State	User Interaction	+ LED	Center LED	- LED	Duration
Boost up	Turn the cap in the + direction				Solid for 5 seconds
Boost down	Turn the cap in the - direction				Solid for 5 seconds

Head calibration

State	User Interaction	+ LED	Center LED	-LED	Duration
Start up	Insert the batteries	*	*	*	Single quick flash
Opening the valve	Automatic upon inserting batteries OR Turn and hold the cap in + direction for 8 seconds (for changing batteries)	•			Solid until the valve is open
Ready to pair	The thermostat is ready to install when the valve is fully open (see above)	*	•	*	Red and Blue: flash for up to 5 minutes Orange solid = not joined Green solid = joined
Closing the valve	Turn and hold the cap in the – direction for 2 seconds				Solid until the valve is closed
Joining	Turn and hold the cap in the + direction for 3 seconds		*		Pulses for up to 2 minutes
Successful Joining	Pairing process begins				Solid for 5 seconds
Unsuccessful joining	If no network is found after 2 minutes		**		Flashes for 5 seconds

Error detection state

State	User Interaction	+ LED	Center LED	- LED	Duration
Low battery					Solid for 1 second (Repeated each hour)
Critical battery			*		Fast flash for 5 seconds (Repeated each minute)
No signal/network					Solid with fade-out after 2 seconds. NOTE: In this event, the thermostat has not joined the wiser system and must either join the gateway or be re-installed.
	Turn the cap in the "–" direction to start a boost				Fast flash for 5 seconds (Repeated)
	Turn the cap in the "+" direction to start a boost				Fast flash for 5 seconds (Repeated)

Troubleshooting

Symptom	Possible cause	Solution	
Thermostat is not responding or app not measuring the temperature.	Power outage or Wiser Gateway generation restarted.	Post power outage, Wiser Gateway generation needs up to 15 minutes to recover to normal.	
Thermostat displays offline in the app or the center LED blinks.	Poor signal between the Wiser Gateway and Thermostat. The batteries need replacing in the Thermostat. The Thermostat has been reset through the human interaction at physical device.	Rejoin the Thermostat in the app. Replace the batteries and re-calibrate Thermostat, refer to the replacing batteries and calibrating the device. Re-configure the device.	

Technical data

Power supply	2x 1.5 V IEC LR6 (AA) alkaline batteries
Without power supply	Connection data are retained
Temperature setting range	5 °C to 30 °C
Temperature resolution	0.5 °C
Control accuracy	< 0.8 °C at 4 °C/h
Surface temperature at place of installation	max. 93 °C
Water temperature	max. 110 °C, max. continuous 73 °C
Ambient operating temperature	0 °C to 45 °C
Storage temperature	-20 °C to 65 °C
Transportation temperature	-20 °C to 65 °C
Operating frequency	2.4 GHz
Max. radio frequency power transmitted	max. 20 mW (13 dBm)
Degree of contamination	2
Radio range	30 m free field
Energy class	IV - 2%
Software class	A
Protection rating	IP30
Dimensions (HxØ)	93 x 51 mm
Communication protocol	Zigbee 3.0 certified

Compliance

Compliance information for Green Premium products

Find and download comprehensive information about Green Premium products, including RoHS compliance and REACH declarations as well as Product Environmental Profile (PEP) and End-of-Life instructions (EOLI).

General information about Green Premium products

Click the link below to read about Schneider Electric's Green Premium product strategy.

https://www.schneider-electric.com/en/work/support/green-premium/

Find compliance information for a Green Premium product

Click the link below to search for a product's compliance information (RoHS, REACH, PEP and EOLI).

NOTE: You will need the product reference number or product range to perform the search.

https://www.reach.schneider-electric.com/CheckProduct.aspx?cskey=ot7n66yt63o1xblflyfj

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