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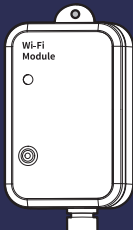
Optimising Around You

Installation & Operation Manual

Wi-Fi Module and App (Only for PEM750)

Model

TL7002-WF



Copyright information

- Navien UK Ltd. All rights reserved.
- Wi-Fi®, the Wi-Fi CERTIFIED logo, and the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance.
- Trademarks and trade names used in this manual are the property of their respective owners.

If your device requires service, you have several options for getting service, contact Customer Services at 0344 332 2323 or on the website: <https://navien.co.uk>

For warranty service, always contact Customer Services first.

TEL: 0344 332 2323

Add: Building 2, Guildford Business Park, Guildford, GU2 8XG.

Safety information

Read and follow all safety instructions in this manual to avoid unsafe operating conditions, property damage, personal injury, or death.

Safety messages used in this manual

DANGER

Indicates an imminently hazardous situation which, if not avoided, could result in severe injury or death.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in injury or death.

CAUTION

Indicates a potentially hazardous situation that, if not avoided, could result in property damage.

DANGER

- **Do not supply 230 VAC to this device.**
 - Doing so may result in fire, severe personal injury, or death.



WARNING

- **Do not disassemble or attempt to repair the device.**
 - You may damage the device.
 - Any attempt to disassemble or repair the device voids Navien's Limited Warranty. Navien is not responsible for damage or injuries caused by voiding the Navien's Limited Warranty.
- **Do not store flammable materials near the device.**
 - This may cause a fire or damage the device.
 - Keep all flammable products far away from the device and store them in approved containers. Keep the containers closed tightly and out of the reach of children and pets.
- **Avoid interference with other electronic devices.**
 - The device emits radio frequency (RF) signals that may interfere with unshielded or improperly shielded electronic equipment, such as pacemakers, hearing aids, medical devices, and other electronic devices. Consult the manufacturers of your electronic devices to solve any interference problems you experience.
- **When mounting the device on a wall, make sure that the wall is strong enough to support the device.**
 - The device could fall if the wall is not strong enough and this may damage the device or cause injury.

CAUTION

- **Use suitable tools and appropriate force to install the device.**
 - Using unsuitable tools or excessive force during installation may damage the device.
- **Do not expose the device to direct sunlight or high temperatures for an extended period of time.**
 - Prolonged exposure to sunlight or extreme temperature can cause permanent damage to the device's internal components.
- **Avoid water and wet areas.**
 - This may damage the device's internal components. Always keep the device dry.
- **Do not clean the device with water or a damp cloth.**
 - You may damage the device.
- **Do not install the device in very hot or very cold areas. The operating temperature of the device is 0°C–40°C.**
- **Do not use loose or damaged cables.**
 - This may result in a poor connection or cause the device to malfunction.
- **This device has been approved for use in the UK and EU only.**
 - Using the device in any other country will void the manufacturer's warranty.

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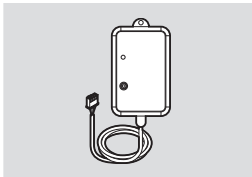
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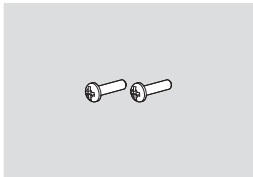
Overview

Included items

Open the packaging and ensure that the following items are provided.



Wi-Fi Module (only for pem750)



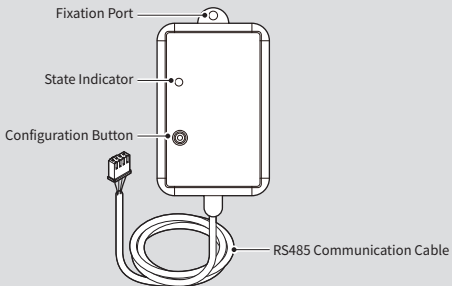
Screws (2ea)



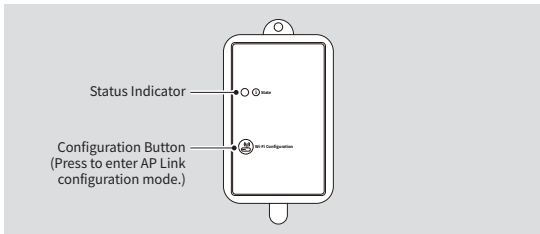
Cable Ties (4ea)

Device layout

Components



Buttons and indicators



The status indicator displays the following conditions:

LED Colour/Status	Description
Red	Configuring the network.
Purple	Connecting to the router
Blue	Connecting to the server
Green	Communicating with the server properly.
Blinking	Communicating with the main board abnormally.

Installing the Wi-Fi module

The Wi-Fi module should be installed in a position where there are no obstacles between the Wi-Fi module and the wireless router, as this could interfere with communication. When the Wi-Fi module is too far from the router or there are potentially interfering elements between them, it may affect the performance of the Wi-Fi module. Also, place the Wi-Fi module where you can easily press the AP button for device verification.

CAUTION

Do not install the Wi-Fi module in an area where it may be exposed to moisture or be struck. The operating temperature range of the module is 0°C–40°C, and its operating humidity range is 30%–90% (relative humidity).

Mounting the Wi-Fi module to the unit

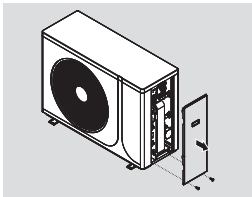
- 1 Disconnect the main power supply to the heat pump.



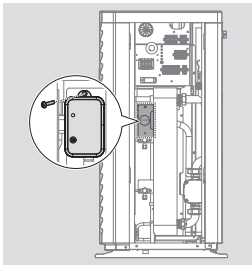
WARNING

Do not connect the Wi-Fi module cable while the heat pump is powered on. Doing so may result in electric shock or damage to the module.

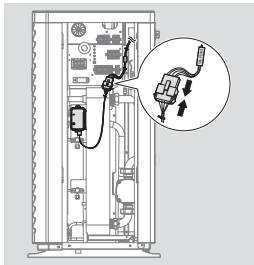
- 2 Remove the two screws from the bottom of the right side panel, press down on the panel, and remove the panel from the unit. For detailed instructions on accessing this unit, refer to the PEM750 Installation & Operation Manual.



- 3 Secure the Wi-Fi module using a screw at the location labeled “DTU/ WIFI” on the unit. The exact location may vary depending on the model, but it is typically located on the right side of the unit.



- 4 Connect the RS485 communication cable to the connector labeled “DTU/ WIFI” on the unit.



Installing the Wi-Fi module indoors

- 1 Disconnect the main power supply to the heat pump.



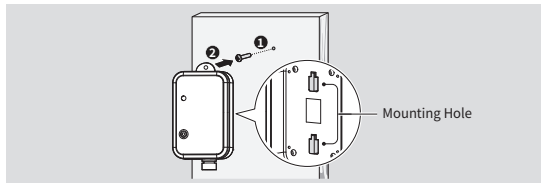
WARNING

Do not connect the Wi-Fi module cable while the heat pump is powered on. Doing so may result in electric shock or damage to the module.

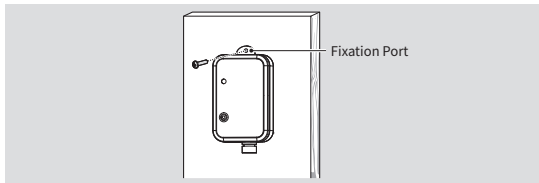
- 2 Mount the Wi-Fi module using screws or magnets.

- **Mounting with screws**

- A. Install the screw into the wall, and then insert the screw head into one of the Wi-Fi module's mounting holes to hang the module on the wall.

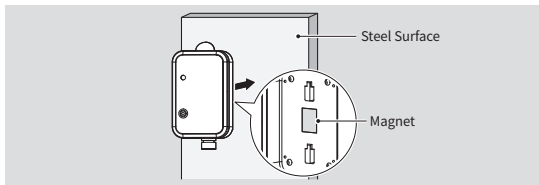


B. Install the screw into the fixation port to fix the module on the wall.



- **Mounting with magnets**

Attach the Wi-Fi module to the surface made of steel.



Using the Navien HeatPump app

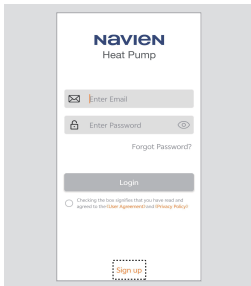
Downloading the HeatPump app

To download the Navien HeatPump app, scan the QR code or search “Navien HeatPump” from the App Store (iOS) or Google Play (Android).



Signing up for a Navien Heat Pump account

- 1 Launch the Navien HeatPump app and tap **Sign up** on the Log-in screen.



- 2 Enter your valid email address and password.
- 3 Tap **Send** next to **Verification Code**. A verification code will be sent to the email address.
- 4 **Check your email inbox** for the verification code and enter the received verification code into the Verification Code field.
- 5 Check the box next to “Please read and agree Privacy Policy” and tap **Next** to complete the sign-up process.

Logging in

On the Log-in screen, enter your email address and password and tap **Login**.

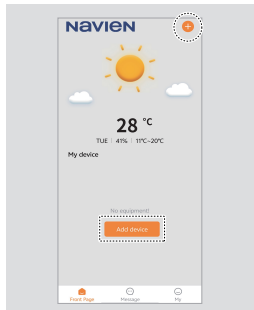


If you forgot your password, tap **Forgot Password?**, enter your email, request a verification code, enter the code, and tap **Next** to reset your password.

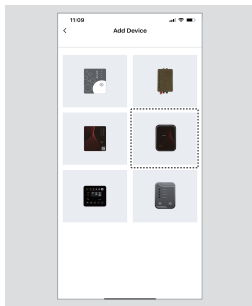
Adding a device

Follow the instructions to add a device and connect it to Wi-Fi.

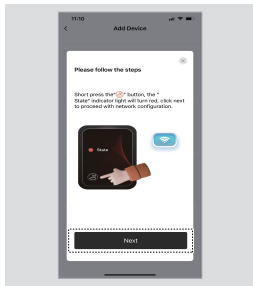
- 1 When you are logged in, tap **Add device** or +.



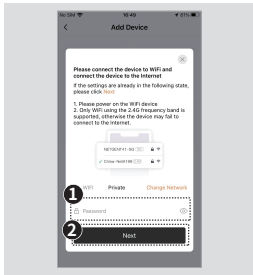
- 2 Select your device to connect it to Wi-Fi.



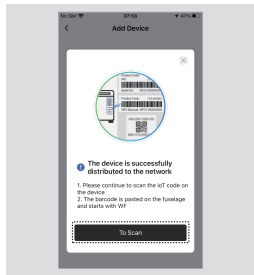
- 3 Follow the steps on the screen and tap **Next**.



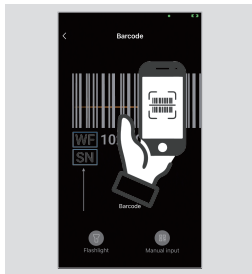
- 4 Follow the steps on the screen, enter your Wi-Fi password and tap **Next** to confirm. The app will automatically search for the Wi-Fi module.



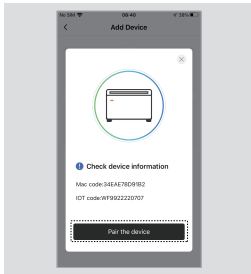
- 5 When the device is successfully connected to the Wi-Fi network, tap **To Scan** to allow the app to use the camera for scanning.



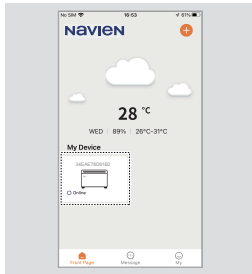
- 6 Scan the serial number and Wi-Fi code on the heat pump or tap **Manual input** to enter it manually.



- 7 When the serial number and Wi-Fi code are successfully registered, tap **Pair the device** to complete pairing the device with the app.

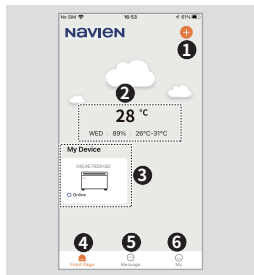


Once the device is properly paired with app, the device status will appear on My Device on the Home screen.



About the Home screen

On the Home screen you can view the current weather, check your device's status, add a new device, and navigate between the home, message, and user profile pages.

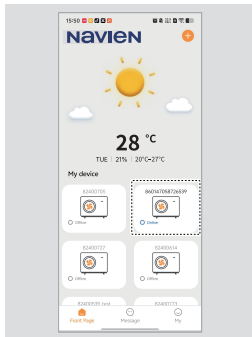


No.	Name	Description
1	Add Device	Add a device to pair with.
2	Weather Display	Displays the current temperature, date, and humidity and set target temperature.
3	Device Status	Displays registered device and its operating status.
4	Front Page	Move to the Home screen.
5	Message	View shared device invitation messages and allows you to accept or decline a shared device invitation received from another user.
6	My	Displays the user profile and app settings, allowing you to view account information, check app details, update the app, or sign out.

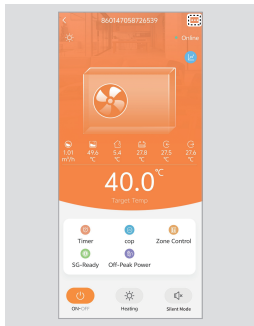
Enabling or disabling AT compensation for zones

Follow the instructions to enable or disable AT compensation for different zones.

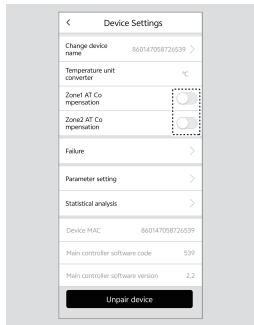
- 1 On the Home screen, select the device to control.



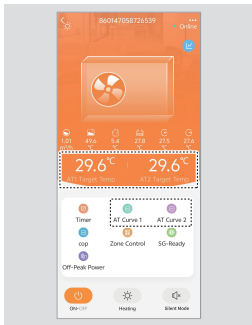
- 2 On the Device main screen, tap the settings (•••) button.



- 3 On the Device Settings screen, toggle the switch next to the desired zone to turn AT Compensation on or off.



When AT Compensation is enabled for a zone, you can view and adjust the target temperature for that zone on the Device main screen.



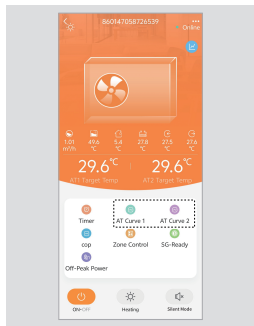
Adjusting the AT compensation curve

Follow the instructions to adjust the slope and offset values for AT Compensation settings to define how steeply the temperature changes with outdoor temperature.

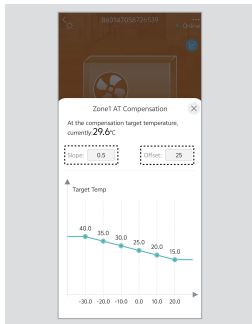
- 1 On the Home screen, select the device to control.



- 2 On the Device main screen, select the zone you want to configure.



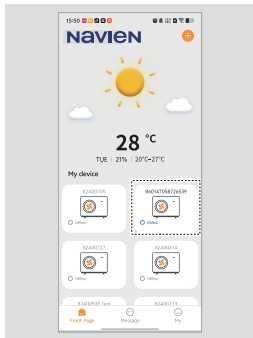
- 3 In the AT Compensation popup, locate the Slope and Offset input fields, adjust the slope and offset value, then tap **Confirm** to apply the changes.



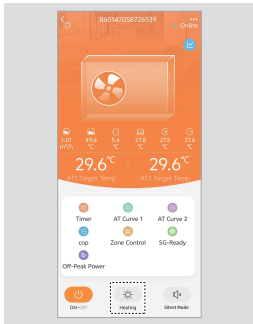
Adjusting the target temperature for heating or hot water

Follow the instructions to adjust the target temperatures for heating or hot water.

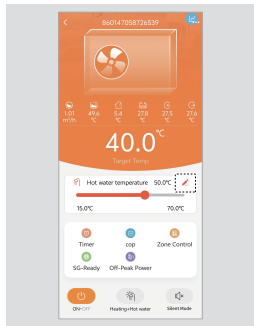
- 1 On the Home screen, select the device to control.



- 2 On the Device main screen, tap the mode button and select the desired mode to adjust.



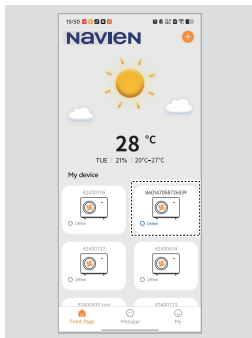
- 3 On the Device main screen, tap the edit button and enter a target temperature, then tap **Confirmed** to apply.



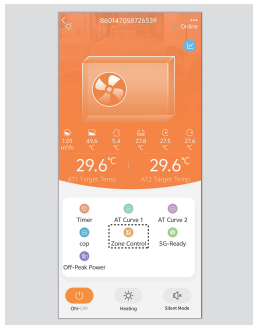
Adjusting the target room temperature by zone

Follow the instructions to adjust the target room temperatures by zone.

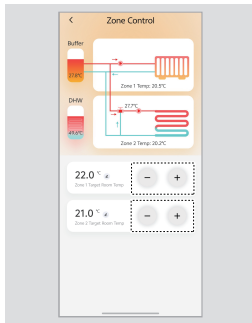
- 1 On the Home screen, select the device to control.



- 2 On the Device main screen, tap **Zone Control**.



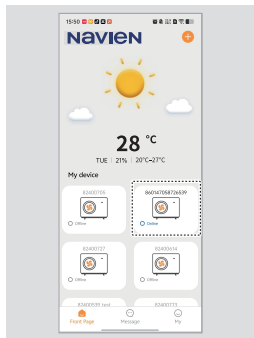
- 3 On the Zone Control screen, tap – or + next to each zone to adjust target room temperature.



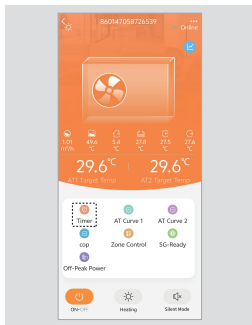
Setting the timer

Follow the instructions to set the on/off timer, timer mute and warm water circulation system.

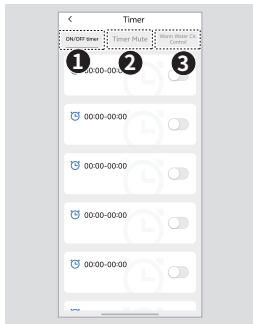
- 1 On the Home screen, select the device to control.



- 2 On the Device main screen, tap **Timer**.



- 3 Tap the menu to configure the ON/OFF timer, enable timer mute, or set the warm water circulation system.

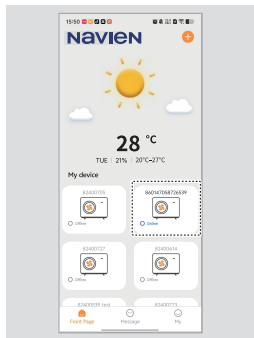


No.	Name	Description
1	ON/OFF timer	Toggle the switch next to the set timer to enable or disable the timer.
2	Timer Mute	Toggle the switch next to the set timer to mute or unmute the timer.
3	Warm Water Cir. Control	Toggle the switch next to the set timer to activate or deactivate the warm water circulation system.

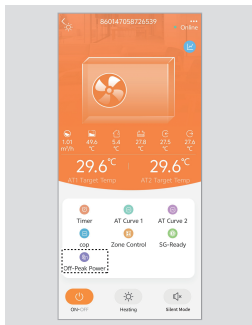
Setting the off-peak power timer

Follow the instructions to schedule device operation during off-peak electricity hours using the off-peak power timer.

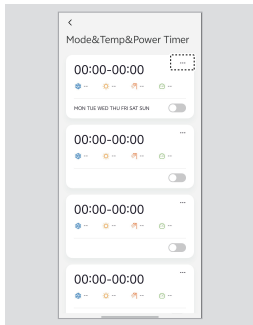
- 1 On the Home screen, select the device to control.



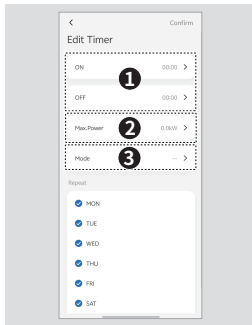
- 2 On the Device main screen, tap **Off-Peak Power**.



- 3 On the Mode&Temp&Power Timer screen, tap the settings (•••) button on the set timer.



- 4 Tap > on the timer settings menu to set the off-peak power timer's details.

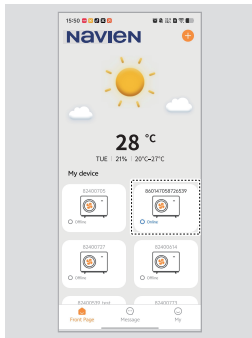


No.	Name	Description
1	ON/OFF timer	Set the on and off time for the set timer and tap Confirm to apply.
2	Max. Power	Set the maximum power rate for the set timer and tap Confirm to apply.
3	Mode	Select the mode to use during the timer.

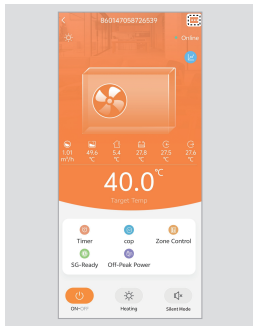
Setting the parameter values

Follow the instructions to modify the parameter values.

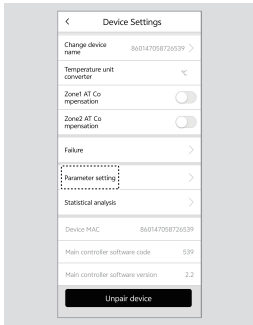
- 1 On the Home screen, select the device to control.



- 2 On the Device main screen, tap the settings (•••) button.



- 3 On the Device Settings screen, tap **Parameter setting**, enter the password in the Enter password pop-up, then tap **Confirmed**.



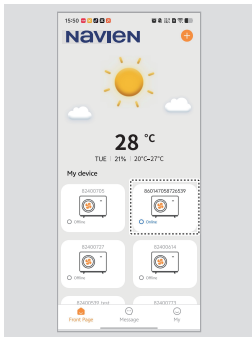
- 4 On the Parameter setting screen, select a parameter and set the desired values.

</

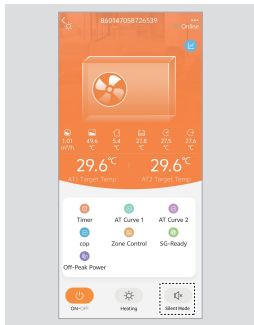
Using Silent mode

Follow the instructions to turn on Silent mode. When this mode is enabled, it limits compressor and fan speed to reduce noise, typically for nighttime use. This also reduces system capacity.

- 1 On the Home screen, select the device to control.



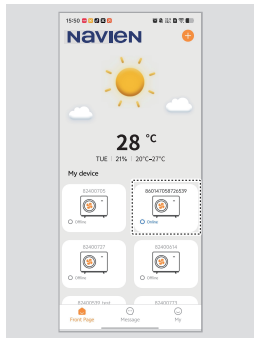
- 2 On the Device main screen, tap **Silent Mode**, then tap **Confirmed** in the confirmation popup.



Viewing the SG-Ready status

Follow the instructions to view the SG-Ready status in the schematic diagram.

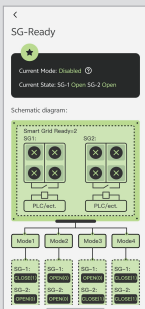
- 1 On the Home screen, select the device to view its details.



- 2 On the Device main screen, tap **SG-Ready**.



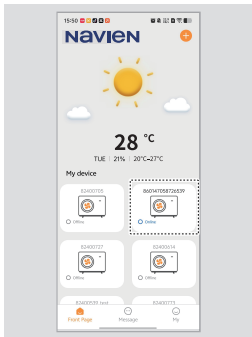
- 3 On the SG-Ready screen, view detailed information about the current operating status.



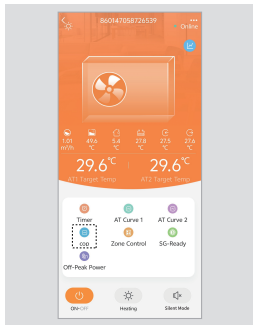
Viewing coefficient of performance (COP)

Follow the instructions to check cooling, heating, and hot water power consumption. Real-time data shows output and coefficient of performance (COP) based on unit capacity.

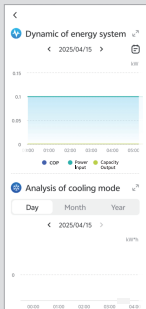
- 1 On the Home screen, select the device to view its details.



- 2 On the Device main screen, tap **cop**.



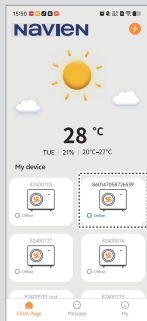
- 3 On the Dynamic of Energy System screen, view real-time data showing output and the coefficient of performance (COP) based on unit capacity. To view data for a different date, tap the calendar (📅) button in the top-right corner of the screen and select the desired date.



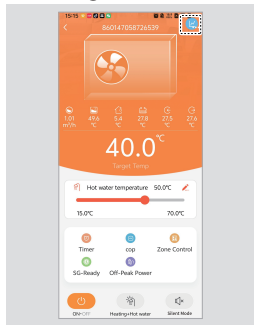
Viewing the statistical analysis

Follow the instructions to view temperature trends and energy consumption in the statistical analysis.

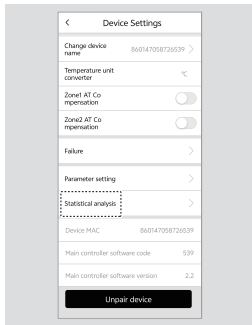
- 1 On the Home screen, select the device to view its details.



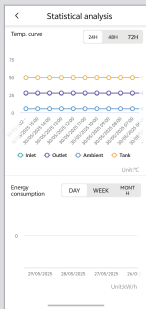
- 2 On the Device main screen, tap the settings (⚙️) button.



- 3 On the Device Settings screen, tap **Statistical analysis**.



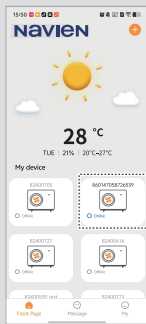
- 4 View the device's temperature curve (24h, 48h, or 72h) and energy consumption data (daily, weekly, or monthly).



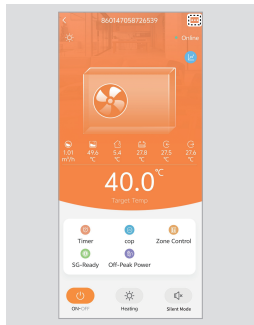
Viewing the error history

Follow the instructions to view detailed information about any occurred errors.

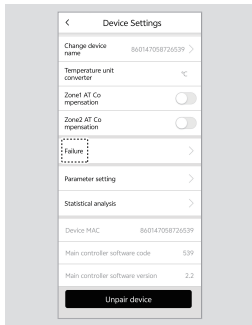
- 1 On the Home screen, select the device to control.



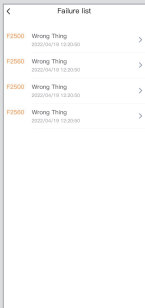
- 2 On the Device main screen, tap the settings (•••) button.











- 3 On the Device Settings screen, tap **Failure**.




















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- 4 On the Failure list screen, select an error to view its details.



About the icons used in the the Navien HeatPump app

Icon	Name	Description
	On/Off	Tap to turn on or off the unit.
	Silent Mode On/Off	Tap to turn on or off Silent Mode.
	Timer Setting	Tap to set the timer's details.
	Temperature Curve	Tap to view device curve information.
	Troubleshooting	Tap to view the device failure information.
	Ambient Temperature Compensation Curve	Tap to view the target temperature of the ambient temperature compensation curve, and configure the slope and gain.
	Peak Shaving	Tap to view and edit the set timers for mode, temperature, and power.
	SG-Ready	Tap to operate SG-Ready and view its operating status. Also, improve the operating efficiency and balance the relationship between supply and demand.

Icon	Name	Description
	Zoned Temperature Control	Tap to view and set the target heating and hot water temperature of Zone 1 and Zone 2.
	Heating and Hot Water	Displays the current operating mode. Tap Save to change the mode.
	Hot Water	
	Heating	
	Refrigeration	
	Refrigeration and Hot Water	
	Electric Heating Condition	Displays the electric heating status.
	Defrost Status	Displays the defrost status.

Icon	Name	Description
	Water Flow	Displays the water flow rate.
	Environment Temperature	Displays the ambient temperature.
	Water Inlet Temperature	Displays the inlet temperature.
	Tank Temperature	Displays the tank temperature.
	Room Temperature	Displays the indoor temperature.
	Outlet Water Temperature	Displays the outlet water temperature.
	Buffer Tank	Displays the buffer tank temperature.
	Setting	Tap to change the function settings of the unit.
	Share	Tap to share the device's information.

Recycling and disposal

Disposal of the old appliance

Appliance marked with the symbol shown here must not be disposed of in the domestic refuse. You are obliged to dispose of such old electronic appliances separately. Please consult your local authority about the possibilities of organised disposal. With this environment-friendly form of disposal, old appliances are recycled or used in other forms.

WEEE: Recycling or disposing of the device and its parts



- The device must be recycled in compliance with the WEEE Directive (Waste Electrical and Electronic Equipment), which specifies the:
 - selective collection of waste electrical and electronic equipment.
 - selective systematic treatment of certain components and substances considered to be dangerous,
 - reuse, recycling, and recovery of the collected waste electrical and electronic equipment.
- Do not dispose of the device or any of its accessories with your regular household waste.
- Ensure that the old unit and any of its accessories are appropriately disposed of.
- Deposit the product at an appropriate collection point for evaluating, treating, and recycling waste electrical and electronic equipment.
- Observe all relevant regulations and laws.

Warranty

Manufacturer's warranty of 2 years is provided.

Specifications

The following table lists the specifications for the wireless communication module.

Item	Description	
Transmission frequency (GHz)	Wi-Fi	2.412 to 2.472
	Bluetooth	2.402 to 2.480
Max transmission power	Wi-Fi	802.11b +16dBm(@11Mbps)
		802.11g +15.5dBm(@54Mbps)
		802.11n +15dBm(@HT20,MCS7)
	Bluetooth	10dBm
Power Supply Voltage (V)		3.0 to 3.6
Supply Current	Peak (continuous transmission)	260mA
	Average (STA, networked standby)	24mA(DTIM1)
	Average (STA, 1KB/s)	54mA
	Average (STA, 1KB/s)	85mA
Working Temperature (°C)	-40 to 85	
Storage Temperature (°C)	-40 to 125	

Certification



Manufactured by NAVIEN UK LTD

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