

PM1429

3-in-1 Temperature Control Panel User Manual

• PM1429.010x temperature control panel, three-in-one, framed,
matched with PM130x series button panel

• PM1429.020x temperature control panel, three-in-one, frameless,
matched with PM150x series button panel

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Release Notes

version number	Published on	illustrate
V1.0	June 29, 2021	First published
V1.2	Added air conditioning constant temperature control function on September 2, 2021	
V1.3	Improved parameters on October 10 , 2021	
V1.4	On December 24 , 2021 , the function button switching logic was added and the switching logic was modified .	
V1.5	On June 15 , 2022 , long press the function key for 5 seconds to activate the programming mode	

Precautions

1. Please read the relevant contents of this manual carefully before using the product.
2. This product is only suitable for use in indoor environments.
3. Make sure this product is installed in a relatively dry and ventilated environment.
4. Before powering on the product, please confirm that the input voltage range meets the requirements of the manual.
5. If the shell is found to be damaged before use, please do not continue to use the product to avoid accidents; make sure the product is properly installed and the product safety shell is intact.
6. Keep this product out of the reach of children.
7. This power supply product is only suitable for use on the bus of the EIB/KNX system.
8. Other matters needing attention:

The following symbol indicates that this product cannot be disposed of as ordinary household waste or waste. In order to prevent the possibility of uncontrolled waste causes damage to the environment and human health and must be recycled to promote the recycling of limited resources.

Therefore, after this product is scrapped, please contact the relevant local waste recycling department to ensure that this product can go into the correct recycling bin.

Waste disposal procedures.



1 Technical parameters

KNX bus powered	DC 21V~31V
KNX power supply current	< 12mA
programming button	Assign physical address and download ETS parameters
programming indicator light	Orange LED
Temperature and humidity sensor	Temperature accuracy: +/- 0.3 °C (can be corrected by parameters) Humidity accuracy: +/- 2.0 %
KNX terminal wiring size	Requires the use of KNX-compliant twisted pair cables
installation	125*86*27mm
method operating	Wall box installation
temperature long-	-5°C~+45°C
term storage temperature	-25°C~+55°C
transportation temperature	-30°C~+70°C

2 Function overview

2.1 Product introduction

The PM1429 three-in-one temperature control panel is a modular installation device that can be easily installed in the reserved space on the building wall.

On the box. Connection to the EIB/KNX system is via bus terminals. Allocation of physical addresses and setting of parameters

The engineering design software ETS is used to complete.

This product can control air conditioning, floor heating and fresh air at the same time. It is equipped with operation buttons and an LCD display to display the current operating modes and related values.

In larger rooms, the temperature value can also be measured by the temperature sensor in the KNX receiving system.

degree value to improve the current temperature control. This product applies the received temperature value to the environment using the definition of weighted value.

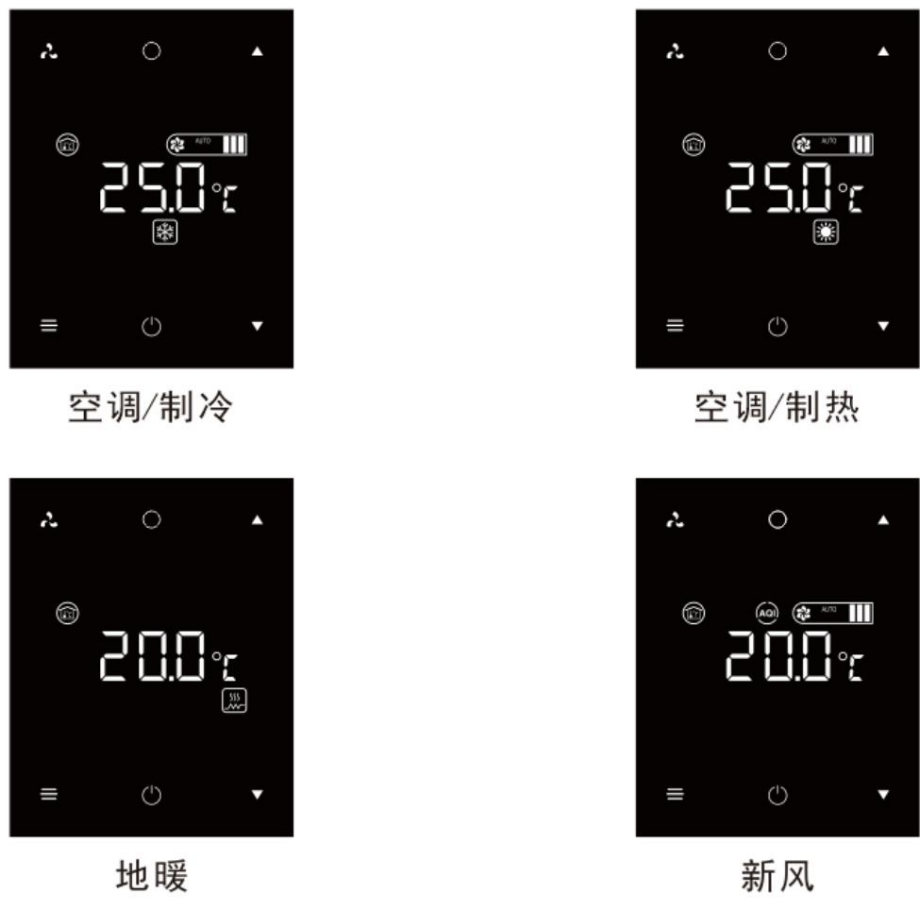
Ambient temperature is under control.

2.2 Main functions

1) Temperature and relative humidity can be measured through internally integrated sensors, or externally measured temperature values can be received through the bus. It can display the measured value, set value of temperature and the measured value of relative humidity. The temperature display can be switched between °C/°F. 2) The air conditioning mode supports ventilation, cooling, heating and drying, and supports command value setting. 3) The air conditioner wind speed supports automatic gear, low gear, medium gear, high gear and OFF gear, and supports command value setting. 4) The air conditioner setting temperature supports 16~30°C, and supports command type, value setting and constant temperature control. 5) The floor heating setting temperature supports 16~30°C, and supports command type, value setting and constant temperature control. 6) Floor heating supports setting the heating element temperature, command type and value setting; 7) Fresh air supports switch value and wind speed gear value setting; 8) Supports remote control and key lock; 9) Supports power-on reset response action and can be configured; 10) Support mode display can be configured; 11) Touch feedback (buzzer) can be configured.

2.3 Function mode display diagram

Note: The air conditioning modes include cooling, heating, ventilation and dehumidification. The figure below only lists the cooling and heating display diagrams.



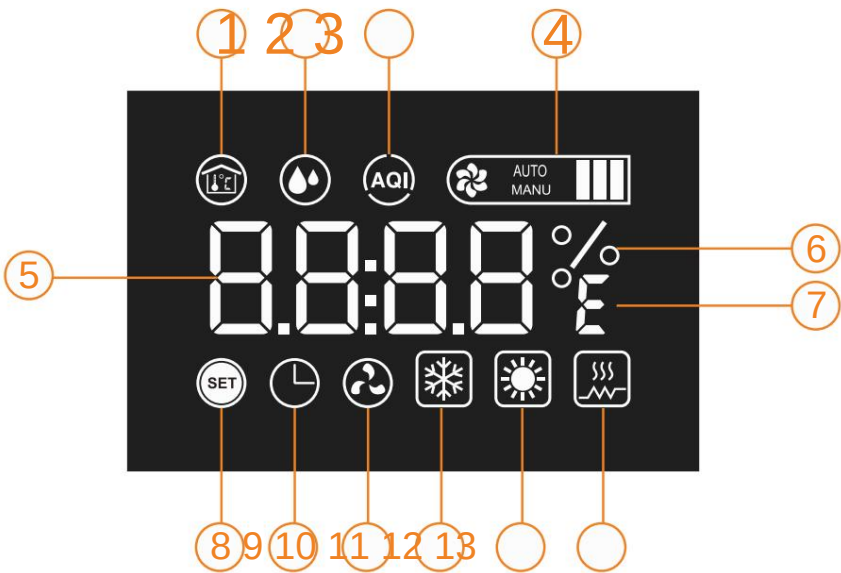
3 How to use

3.1 Capacitive touch operation buttons



1	Mode button	This button is used to switch the air conditioning mode. The air conditioning modes include ventilation, cooling, heating and dehumidification modes. A certain mode can be activated or disabled according to the parameter selection. All are used by default; In the
2	ON/OFF button	setting mode: short press to confirm; In the normal mode Bottom: Short press to turn on/off the current functional device, long press for more than 5 seconds to turn off the entire thermostat, short press or long press to turn on the thermostat; This
3	-button	button is used to lower the set temperature. When this button is operated, the current mode The set temperature will decrease by 1°C, and the display will show "set temperature"; the floor heating set temperature is displayed under the floor heating function, and the air conditioning set temperature is displayed under the air conditioning function; the fresh air function cannot adjust the
4	+Button	temperature; this button is used to increase the setting Temperature, when this button is operated, the current mode set temperature will increase by 1°C, and the display will show "set temperature"; the floor heating set temperature is displayed under the floor heating function, and the air conditioner set temperature is displayed under the air conditioning function; the fresh air function cannot be adjusted temperature;
5	function button	This function button is used to switch between air conditioning, floor heating and fresh air functions. The outer frame of the icon indicates which function interface you are currently in. If it is not displayed, it defaults to the air conditioning function interface;
6	[Wind speed button]	When this button is operated, the device switches the current fan speed according to the running sequence "1 2 3 Auto 0 1...". If the wind speed OFF gear is prohibited, it will not switch to the OFF gear; the air conditioner wind speed gear and the fresh air function are displayed under the air conditioning function. The fresh air speed gear is displayed below; the floor heating function cannot switch the wind speed gear;

3.2 Display content



1. Indoor temperature/humidity 2. Air conditioner dehumidification mode 3. Fresh air function 4. Air conditioner/fresh air speed display 5. Digital display 6. Relative humidity unit % 7. Temperature unit Fahrenheit (°F)/Celsius (°C)
8. Settings 9. Shutdown delay (unavailable) 10. Air conditioning ventilation mode 11. Air conditioning cooling mode 12. Air conditioning heating mode 13. Floor heating function mode
- Note: Fahrenheit (°F)/Celsius (°C) is configured in the ETS file. This manual uses Celsius (°C) as an example.

Display information of the combination icon: Air

	conditioning cooling mode activated		Air conditioning heating mode activated
	The current interface is air conditioning function, cooling Mode air		The current interface is air conditioning function, heating mode
	conditioning ventilation mode activated		Floor heating mode activated
	The current interface is air conditioning function, ventilation model		The current interface is floor heating function
	Air conditioner dehumidification mode activated	AQI	Fresh air mode activated
	The air conditioner is in low gear and the fan icon is on When the air		The current interface is the fresh air function
	conditioner is rotating, the fan icon is in the middle position. rotating state		The air conditioner is in automatic gear, and the fan icon is rotating. state
	The air conditioner is in high gear, and the fan icon is in rotating state		Setup mode activated

3.3 Function settings

3.3.1 Programming buttons and programming instructions

There are two ways to activate programming mode:

- 1: Press the programming button at the bottom of the screen (position 2 as shown in the dimension diagram) to activate the programming mode;
- 2: Press and hold the function key at the top of the screen (operation button No. 5) for 5 seconds to activate the programming mode;

After the programming mode is activated, the programming indicator light at the bottom (position 3 shown in the dimension diagram) lights up, and the operation is repeated.

Then exit the programming mode and the programming indicator light goes out.

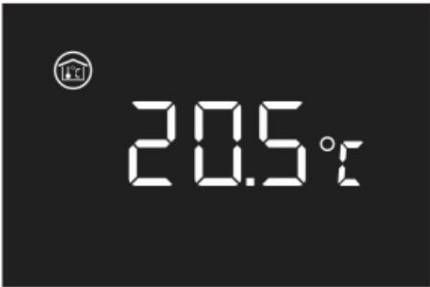
3.3.2 Functional equipment switching operation

Air conditioning function interface:

Short press [Function Button] to switch to the air conditioner interface, short press [ON/OFF Button] to turn on/off the air conditioner, when the air conditioner is on
You can set the temperature, switch modes and adjust the wind speed, as shown in the figure below:



Air conditioner on



Air conditioner shut down

Floor heating function interface:

Short press the [Function Button] to switch to the floor heating interface, and short press the [ON/OFF Button] to turn on/off the floor heating. When the floor heating is on,
You can set the temperature as shown in the figure below:



Floor heating turned on



Floor heating shut down



Fresh air function interface:

Short press the [Function Button] to switch to the fresh air interface, and short press the [ON/OFF Button] to turn on/off the fresh air. When the fresh air is on,

The wind speed can be adjusted, as shown in the figure below:



Start fresh air



Fresh air shut down

Multiple functional interfaces:

When the air conditioning, floor heating and fresh air functions are all turned on, the icon frame indicates which functional state the current interface is in, as follows

As shown in the figure:



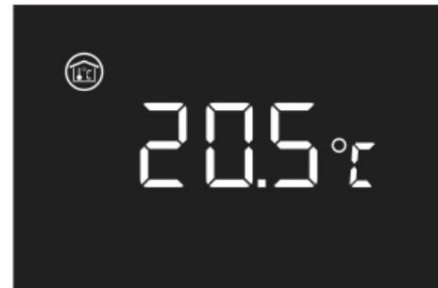
The picture above shows that the air conditioner, floor heating and fresh air are all turned on, and the current interface is the air conditioning interface.

No functional interface:

When the air conditioner, floor heating and fresh air are all turned off, the current interface will automatically return to the air conditioning interface after 5 seconds, as shown below

Taking switching to floor heating as an example, without short pressing the [ON/OFF button] to turn on the floor heating:

After switching to the floor heating interface, there is no operation. After 5 seconds, it returns to the non-functional interface. The default is the air conditioning interface.



Thermostat shutdown interface:

In the power-on state, press and hold the [ON/OFF button] for more than 5 seconds to turn off the thermostat. At the same time, the equipment controlled by the thermostat will be turned off. The screen displays as follows. Short press the [ON/OFF button] again to turn on the thermostat. The screen will display normally and return to the state before the thermostat was turned off.



3.3.3 Temperature set value adjustment

The temperature setting is only valid in the air conditioning/floor heating function interface. Press the [+ button]/[- button] to light up. SET icon and enter the setting mode. At this time, the screen displays the set temperature of the current function. After the setting is completed, press the [ON/OFF button] to confirm, or it will automatically confirm after a timeout of 3 seconds without operation. After confirmation, exit the setting mode. SET icon extinguished.

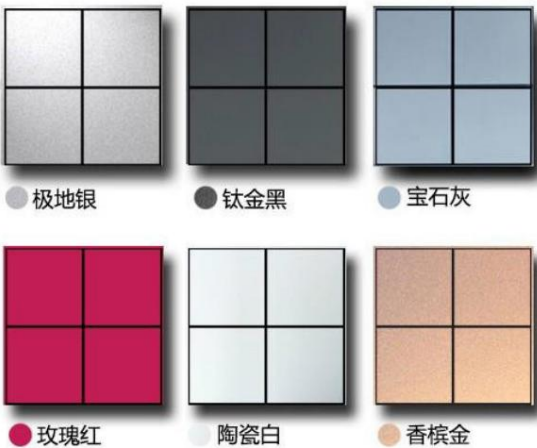


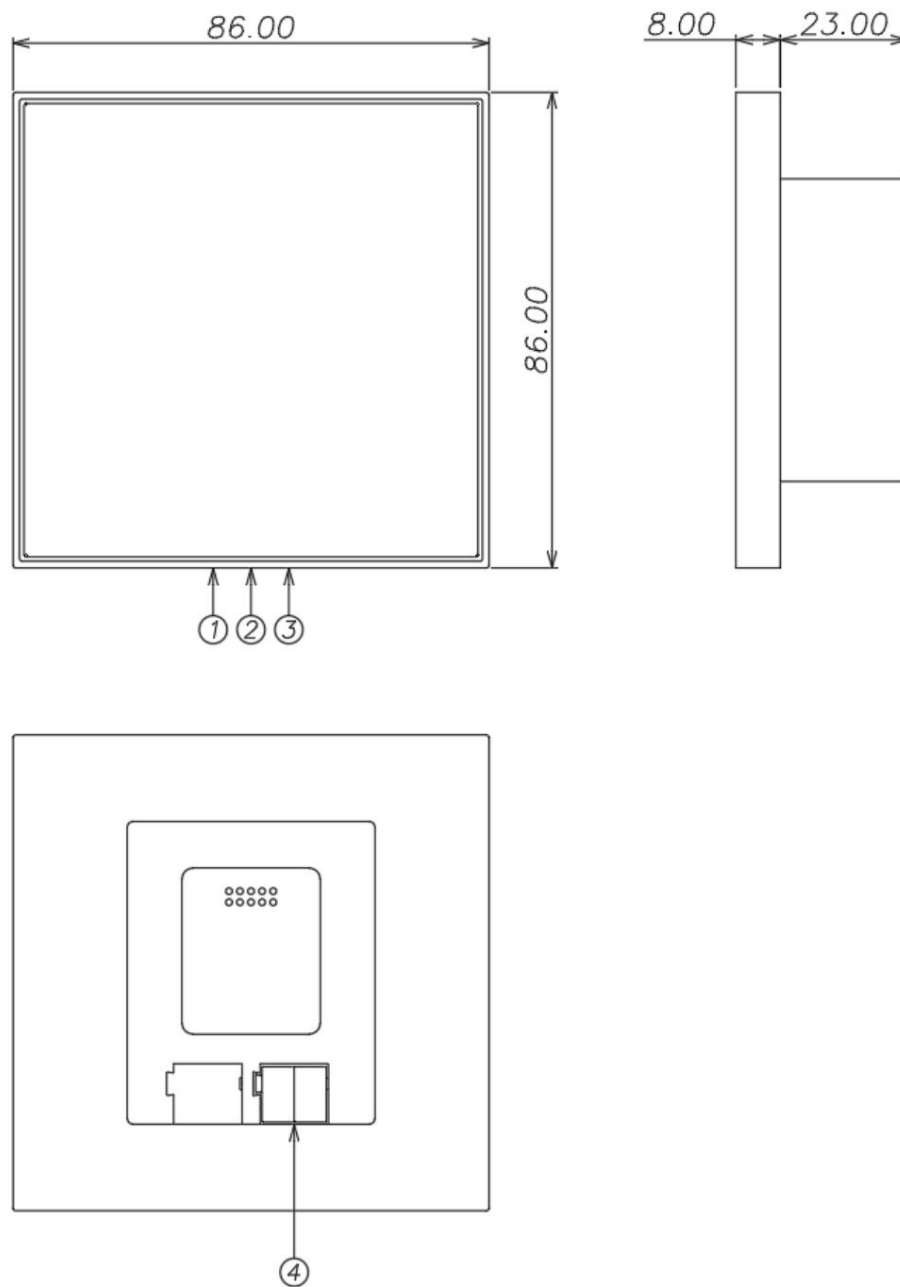
4 Appearance drawing and dimension drawing

PM1429.010X: with frame, optional colors



Frame color, compatible with PM130x series button panels:





1. Temperature and humidity sensor

window 2. Programming

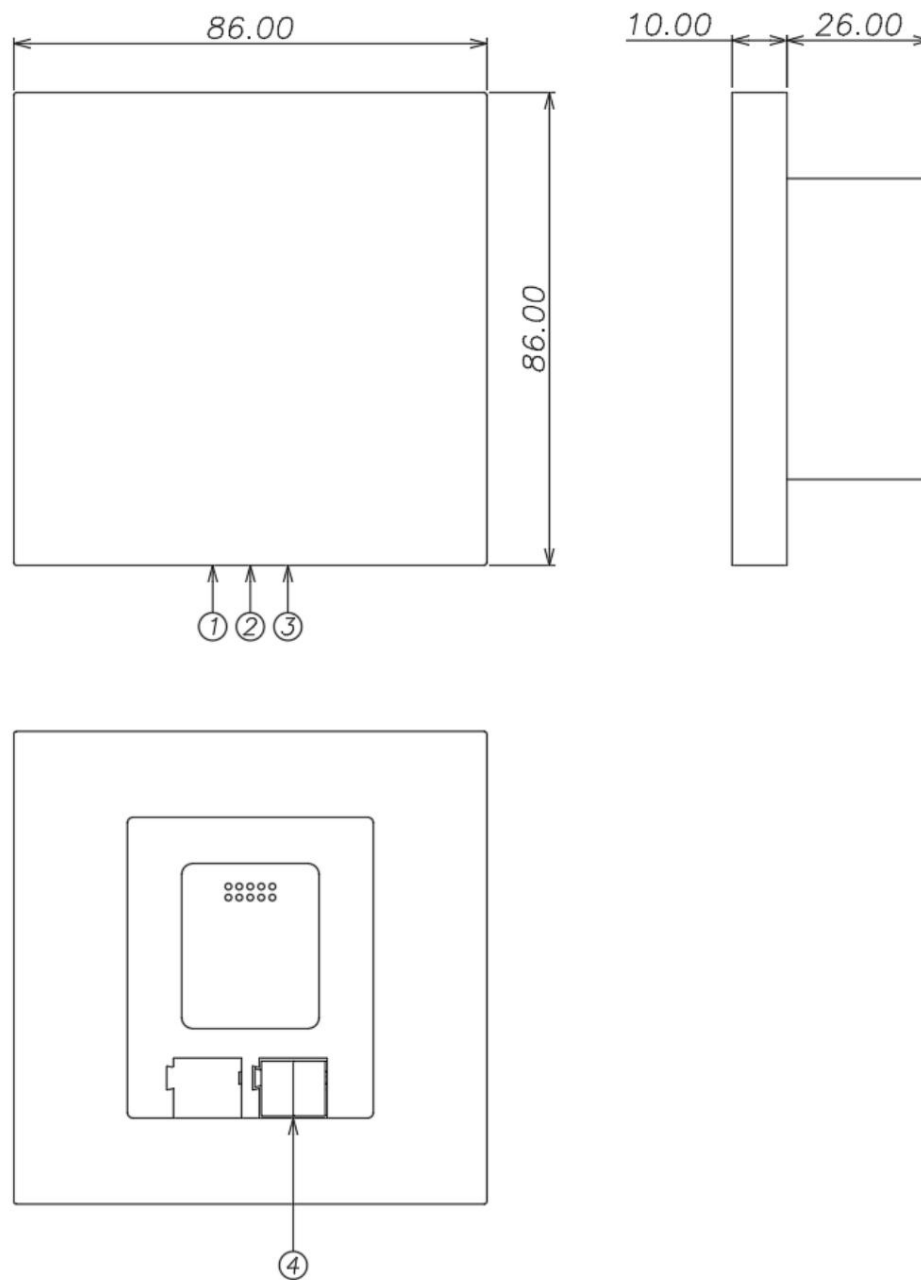
button 3. Programming

indicator light 4. KNX terminal

PM1429.020x: No bezel, no color options

Can be used with PM150x series frameless button panels:





1. Temperature and humidity sensor

window 2. Programming

button 3. Programming

indicator light 4. KNX terminal

5 installation methods

- 1) Use the mounting screws to fix the mounting bracket in the 86 bottom box
- 2) Connect the KNX bus power according to the logo
- 3) Push the panel into the mounting buckle to lock the mounting bracket

6Contact details

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