User manual

SAS965FCT-7RS-485-WIFI

Specification

* Power supply: 100~240VAC 50/60Hz
* Standby Power Consumption: ≤2W
* Display accuracy: 0.1°C
* Temperature setting step: 0.5℃
* Communication: Modbus 485/ 2.4G WIFI
* Displayed temperature range: 0~70°C
* Operating temperature range: 0~50°C
*Temperature setting range: 5~35°C

Display

Fan button

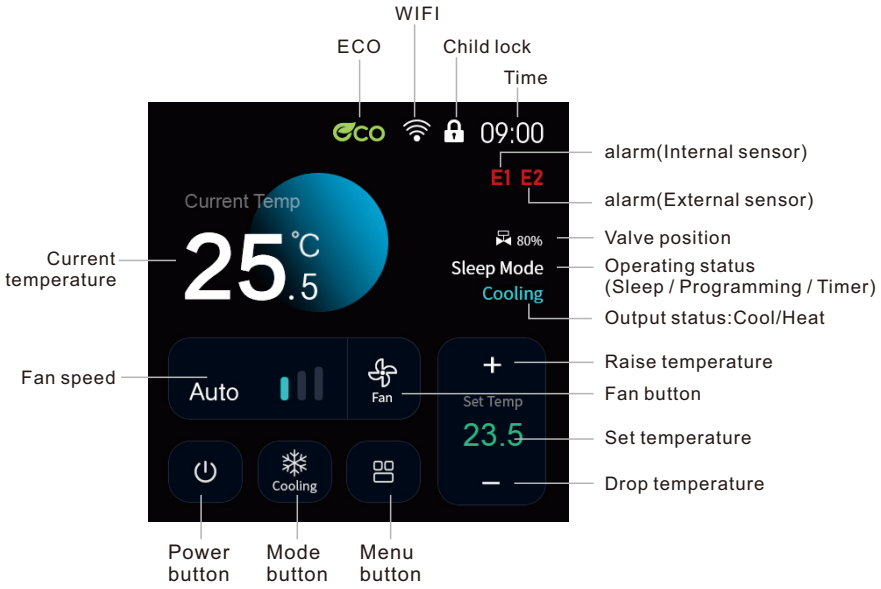
Touch " " button to switch fan speed.
A spinning " " icon indicates that the fan is currently running.

Auto	LOW	MID	HIGH
Auto (Blinking in a cycle)	Low speed	Middle speed	High speed

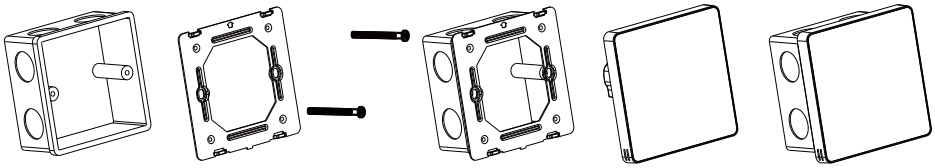
Mode button

Touch" " button to switch different mode.

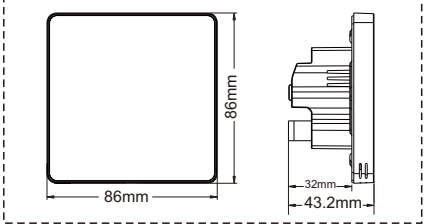
Vent	Cooling	Heating



Installation

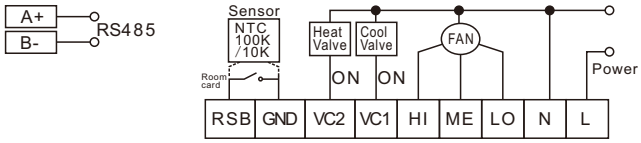


Dimension



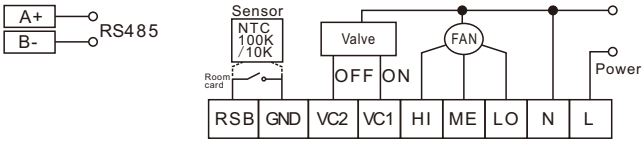
Wiring diagram

4-Pipe, 2-Wire Valve(220VAC), 3 Speed Fan(220VAC), 220VAC Power Supply



100~240VAC 50/60Hz 10A

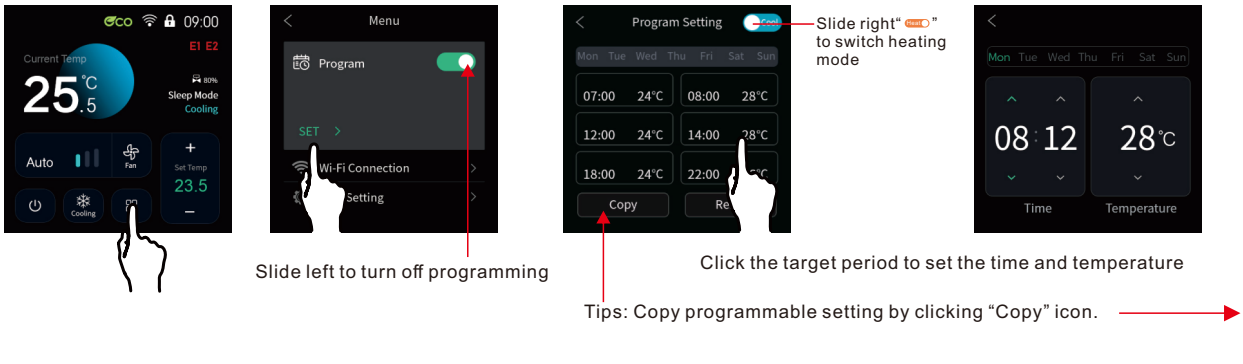
2-Pipe, 2/3-Wire Valve(220VAC), 3 Speed Fan(220VAC), 220VAC Power Supply



100~240VAC 50/60Hz 10A

Programming setting (Default)

When the system is set to programmable mode, you can configure the schedule here.



Default programming(6 period per day)

Default setting(Cooling)

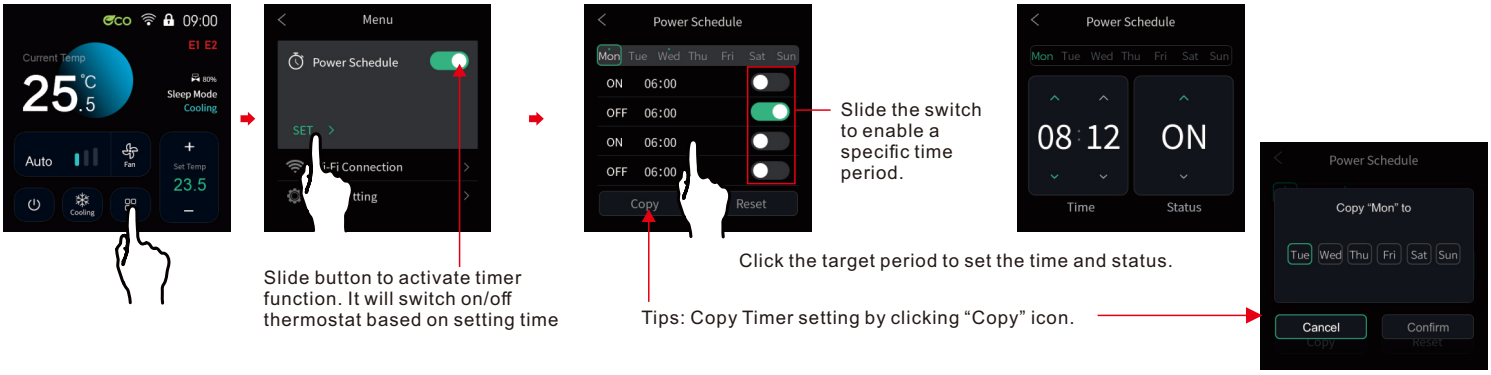
Monday to Sunday	Morning		Out door		Back home		Out door		Back home		Sleep	
	7:00	24°C	8:00	28°C	12:00	24°C	14:00	28°C	18:00	24°C	22:00	26°C

Default setting(Heating)

Monday to Sunday	Morning		Out door		Back home		Out door		Back home		Sleep	
	7:00	21°C	8:00	16°C	12:00	21°C	14:00	16°C	18:00	21°C	22:00	16°C

Timer setting

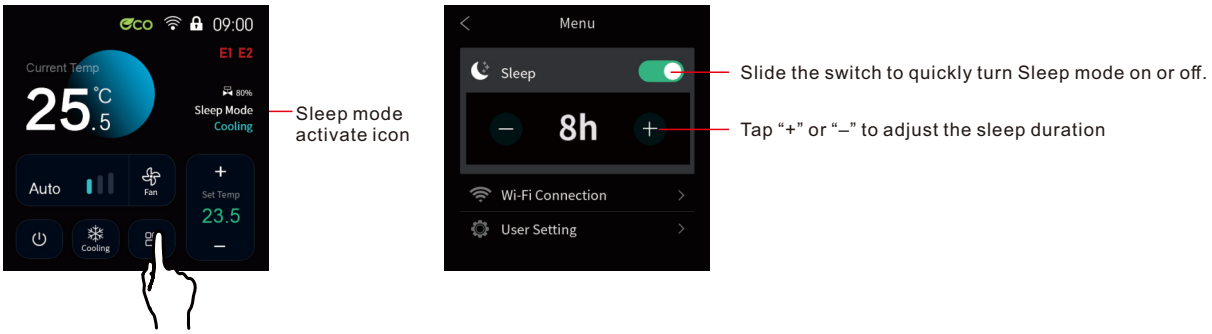
When the system is set to timer mode, you can configure the schedule here. It could switch thermostat on/off based on setting time.



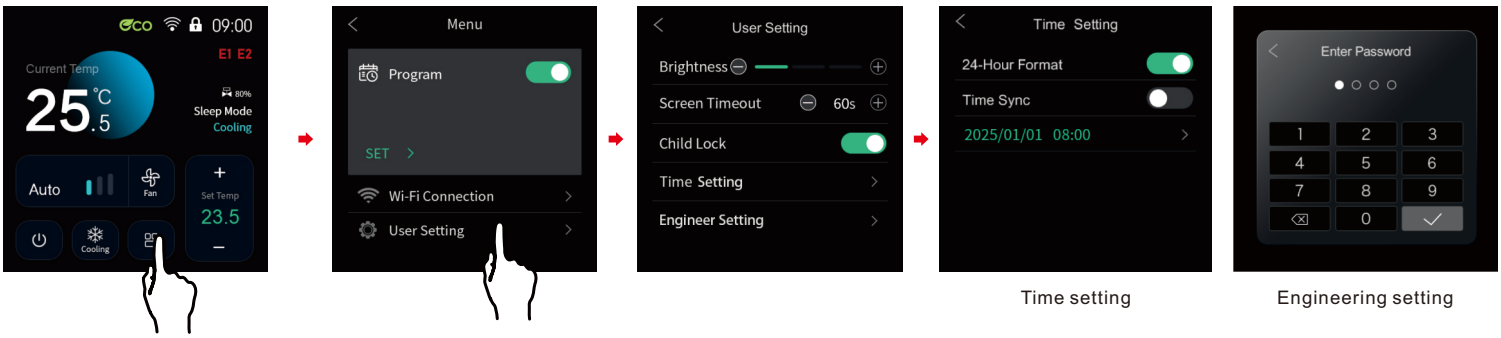
Sleep mode setting

When the system is set to sleep mode, you can configure the schedule here.

Cooling mode: To promote more comfortable sleep and reduce energy consumption, the setpoint temperature will automatically increase by 1°C after one hour during sleep mode is activated. After two hours, the setpoint will increase by 2°C and remain at this temperature until sleep mode is automatically canceled after a total of 8 hours. Once this period ends, the setpoint temperature will automatically return to its original preset value.
Heating mode: To ensure comfortable sleep while saving energy, the setpoint temperature will automatically decrease by 1°C after one hour aduring sleep mode is activated. After two hours, the setpoint will decrease by 2°C and maintain that temperature until sleep mode is automatically canceled after a total of 8 hours. When this time elapses, the setpoint temperature will automatically revert to its initial preset value.



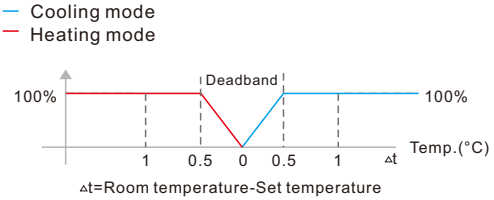
User setting



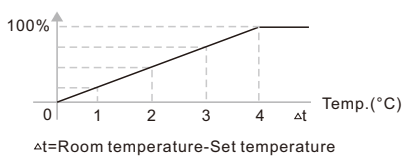
Time setting

Engineering setting

Item	Default	Description
Brightness	Level 1	Adjusting the display brightness allows you to adjust the luminance level to ambient conditions and user preferences.
Screen Timeout	60s	The screen blanking function allows you to automatically turn off the display after a specified period of time. This allows the device to save energy and reduce unnecessary lighting, especially at night.(Setting range:60s,90s,120s,150s,180s)
Child Lock	OFF	To prevent accidental operation by children, users can enable the child lock function. Once enabled, the child lock icon “ 🔒 ” will be displayed on the main screen. When the screen is turned off, it will be locked. Upon turning the screen back on, the main interface will appear, but any attempt to operate controls will prompt for a password (child lock password: 2301). If no operation is performed within 60 seconds, the system will automatically return to the main interface.
Time setting	ON	ON: 24-Hour clock; OFF: 12-Hour clock
	ON	ON: Timer sync(device will correct time based on network after connected Wifi) Factory default: 2025/01/01 08:00 OFF: Manually adjust the time.
Engineering Setting	/	The password “1230”



Auto Fan: Controlled by max/min voltage limits.



Engineering Parameter Table (Engineering Password: 1230)

NO.	Parameter name	Option	Default	Description
1	Rs485 address	1~254	1	RS-485 communication address
2	Baud rate	4800/9600/19200/38400	1	RS-485 baud rate
3	Temperature calibration	-5~+5°C	0	Sensor calibration(external sensor is not available)
4	Maximum setpoint	20~35°C	35°C	It could set the maximum setpoint temperature range
5	Minimum setpoint	5~20°C	18°C	It could set the mainimum setpoint temperature range
6	Power-off memory	ON/OFF	OFF	ON: After a power outage and subsequent restoration, the thermostat will return to its previous state before the power loss. OFF: After a power outage and subsequent restoration, the thermostat will remain in the OFF state.
7	Fan delay off	0/30/60S	30S	After the valve is closed, the fan remains on for a delay to dissipate residual heat from the coil.
8	Fan stop option(H)	ON/OFF	ON	ON: Fan and valve switch on/off simultaneously OFF: The fan runs at low speed when the valve is closed.
9	Fan stop option(C)	ON/OFF	OFF	ON: Fan and valve switch on/off simultaneously OFF: The fan runs at low speed when the valve is closed.
10	Valve start delay	0/3/5 min	0	Minimum interval time between valve closing and reopening
11	2/4 pipe option	2/4	2	2: Two-pipe system 4: Four-pipe system
12	System type	CO/CO&HE	CO&HE	System mode option CO: Cooling+Ventilation CO&HE: Cooling+Heating+Ventilation
13	External input	NO/Sen/Card	NO	No: Temperature is detected by the internal sensor. Sen:Temperature is detected by the external sensor.(It should be NTC100K) Card:Room card occupancy signal
14	ECO heat	5~35°C	18°C	When the room card indicates unoccupied status, the system switches to energy-saving temperature.
15	ECO cool	5~35°C	28°C	
16	Program option	Timer/PROG/OFF	PROG	Timer: scheduled thermostat on/off PROG: Programming function OFF: Sleep function
17	°C/°F	°C/°F	°C	Temperature unit

Modbus

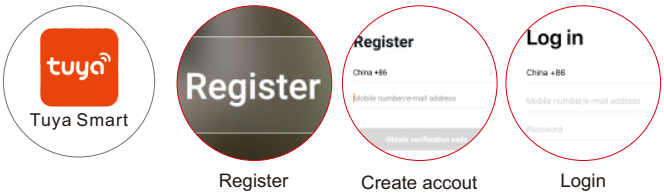
Add-ress	Description	Read/ Write	Options
0	Power on/off	R/W	0: OFF, 1: ON
1	Setting temperature	R/W	5~35°C
2	Fan speed	R/W	0: Auto, 1: Lower , 2: Medium, 3: High
3	Mode	R/W	1: Cooling 2: Heating 3: Ventilation
4	Key lock	R/W	0: Disabled 1: Enabled
5	Sleep mode	R	0: Disabled 1: Enabled
6	Room temperature	R	0~70°C
7	Room humidity	R	0~99%, FF: No humidity function
8	External sensor temp.	R	0~70°C, FF: No external sensor function
9	Room card status	R	0: Unoccupied 1: Occupy FF: No room card function
10	Alarm	R	0: No alarm 1: Internal sensor error 2: External sensor error
11	Rs485 address	R/W	1~254
12	Baud rate	R/W	0: 4800 1: 9600 2: 19200 3: 38400
13	Temperature calibration	R/W	-5~+5°C
14	Maximum setpoint	R/W	20~35°C
15	Minimum setpoint	R/W	5~20°C
16	Power-off Memory	R/W	0: ON 1: OFF
17	Fan delay off	R/W	0/30/60S

18	Fan stop option(H)	R/W	0: ON, 1: OFF
19	Fan stop option(C)	R/W	0: ON, 1: OFF
20	Valve start delay	R/W	0: 0 – No delay, 3: Delay of 3 minutes, 5: Delay of 5 minutes
21	2/4 pipe option	R/W	0: Two-pipe, 1: Four-pipe
22	System type	R/W	0: CO, 1: CO&HE
23	External input	R/W	0: Internal sensor 1: External sensor 2: Room card
24	ECO heat	R/W	5~35°C
25	ECO cool	R/W	5~35°C
26	Program option	R/W	0: Sleep 1: Timer 2: Programming
27	Temperature unit	R/W	0: °C 1: °F
28	Reserve		
29	Reserve		
30	Reserve		
31	Reserve		
32	Reserve		
33	Reserve		
34	Reserve		
35	Reserve		

Link with APP

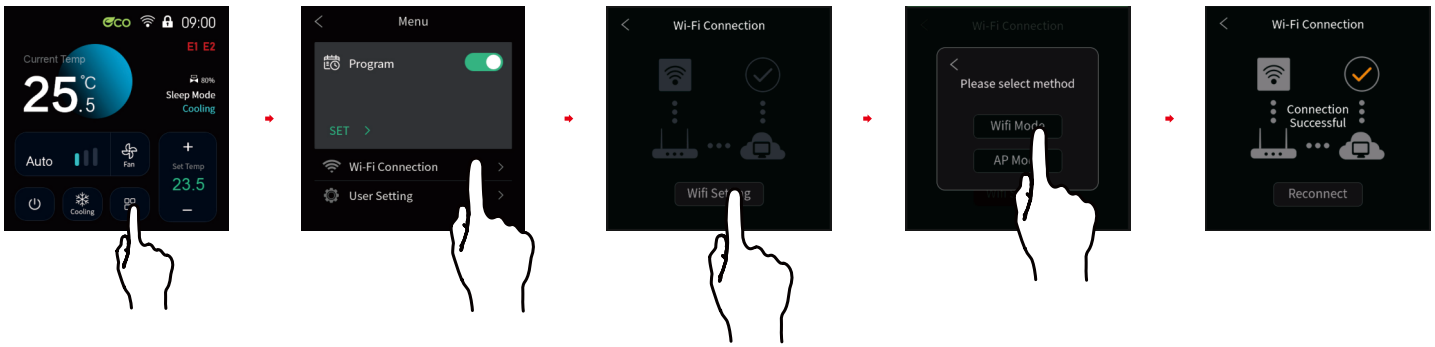
Registration and login:

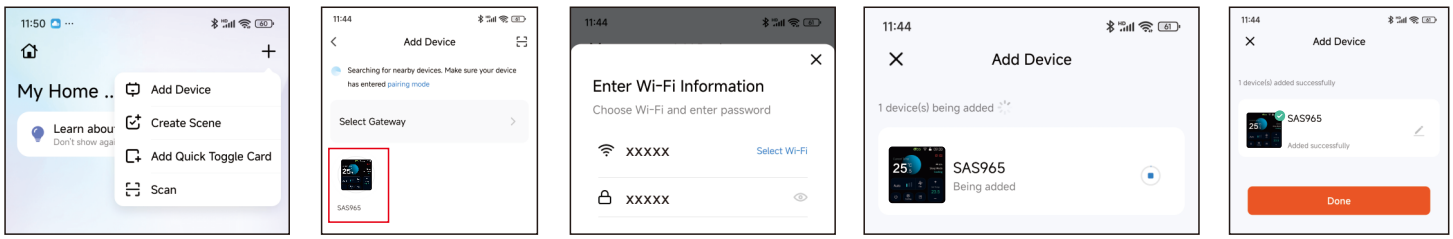
1. Click App store(click Android application market)
2. Search " TuyaSmart " and download .
3. Click the "Register" to create account.
   When you finish the register, log in your mailbox and click on the link to activate your account, then can login APP.



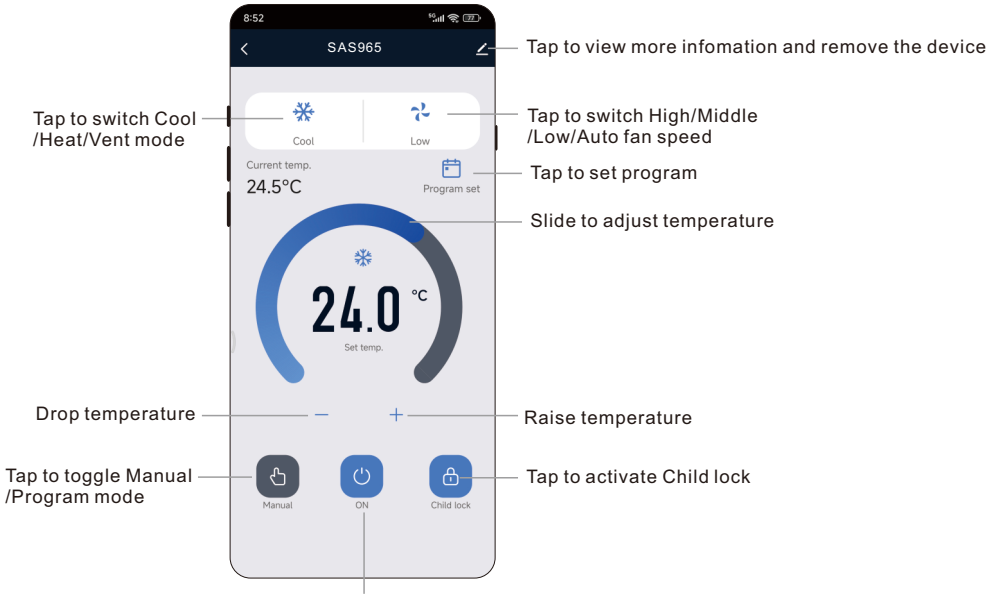
Tips: Turn on the Wifi and Bluetooth of your smartphone.

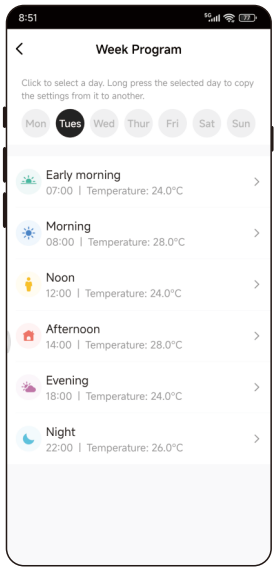
For the device :





1. Click" + ", click "Add Device".
2. Click your device.
3. Enter your wifi account and password, click "Next"
4. Adding...
5. Click "Done", it means device added successfully.





Program interface
Click the target period to set the time and temperature

Voice command :

* Tips: you need connect to the Google and Alexa speaker. After waking up the speaker, you can say:

Amazon Alexa

* Alexa, open <device name>.
* Alexa, close <device name>
* Alexa, make it warmer in <device name>.
* Alexa, what is the temperature of <device name>.
* Alexa,make it cooler in <device name>.
* Alexa,set <device name>to twenty.
* Alexa,set <device name> to <mode value>.

Google Assistant

* OK,Google.turn on <device name>.
* OK,Google.turn off <device name>.
* OK,Google.set <device name> to 16 degrees.
* OK,Google.what is the temperature of <device name>.
* OK,Google. make it warmer in <device name>.
* OK,Google. make it cooler in <device name>.
* OK,Google. set <device name> to <mode value>.

* The temperature unit of thermostat and speaker must be the same.