Manuals+ — User Manuals Simplified.

solstice CC32 WIFI Module

solstice CC32 WIFI Module User Manual

Contents

solstice CC32 WIFI Module

Specifications

- **Model:** CC32 WIFI Module
- **Product Code:** WF-CC32-0524

Product Information

- The CC32 WIFI Module is designed to receive data signals from a cloud server and transmit them to the main device.
- It also receives data signals from the main device and transmits them to the cloud server.
- Additionally, it enables remote upgrades of both the WIFI module baseplate MCU and the main device.

Technical Parameters

Installation: The WIFI module can be installed indoors or outdoors using the magnet on the back. It should be placed away from direct sunlight.

Functional Description

- The module features various indicators for network configuration, router connection, cloud server connection, and 485 communication.
- It also includes a configuration button for entering AP Link configuration mode.

Product Usage Instructions

User Privacy Instructions

- We prioritize user privacy and ensure that user data, such as mailboxes and addresses, is only used after obtaining permission.
- Data security is a top priority, and we take measures to protect user information.

Account Login

- To access the device features, users must register an account using their email address and password.
- The registration process involves receiving a verification code, agreeing to the Privacy Policy, and completing the registration.

Add Device

- After logging in, users can add a new device by following the instructions on the My Device interface.

WIFI Configure Network

- Users can configure the WIFI network by following the steps outlined in the WIFI Module On interface, Enter Password interface, and Searching Device interface.

FAQ

- **Q:** How do I reset my password if I forget it?
- **A:** If you forget your password, click on the "Forgot Password" option on the login interface. Follow the instructions to receive a verification code and reset your password.

Product development and continuous improvement are at SpacePak's core. As such, there may be changes or modifications to products, without notice. In addition, the information and specifications presented in this document are provided as is, without guarantee or warranty of any kind, expressed or implied. For the most up-to-date information regarding our products, you may contact our Customer Service group at **custservice@spacepak.com**.

User Privacy Instructions

- We take your privacy very seriously and we promise to inform you how we use the data.
- Users' private data, such as mailboxes, and addresses, before uploading to the cloud, we will get your permission, and we will work hard to protect your data security.

Description

- Receive data signal from the cloud server and transmit to the main device;
- Receive data signal from the main device and transmit to the cloud server;
- To achieve remote upgrade of the WIFI module baseplate MCU by cloud server;
- To achieve the remote upgrade of the main device by WIFI module baseplate MCU.

Technical Parameters

- **OPERATING VOLTAGE:** DC8V~12V (Recommended value 12V)
- **OPERATING CURRENT:** Max. recurrent peak 1A, average standby current 50mA
- **TEMP. RANGE:** Operating Temp.: -22°F~+158°F; Storage Temp.: -40°F~+185°F
- **LED INDICATOR LIGHT:** 4 lights, Network configuration indicator, router connection indicator, cloud server connection indicator, 485 communication indicator;
- **DIMENSION (L×W×H):** 3″ x 2.5″ x 1″

Installation

- There is a magnet on the back of the WIFI module, it can be installed indoors or outdoors, and avoid direct sunlight;

Functional Description
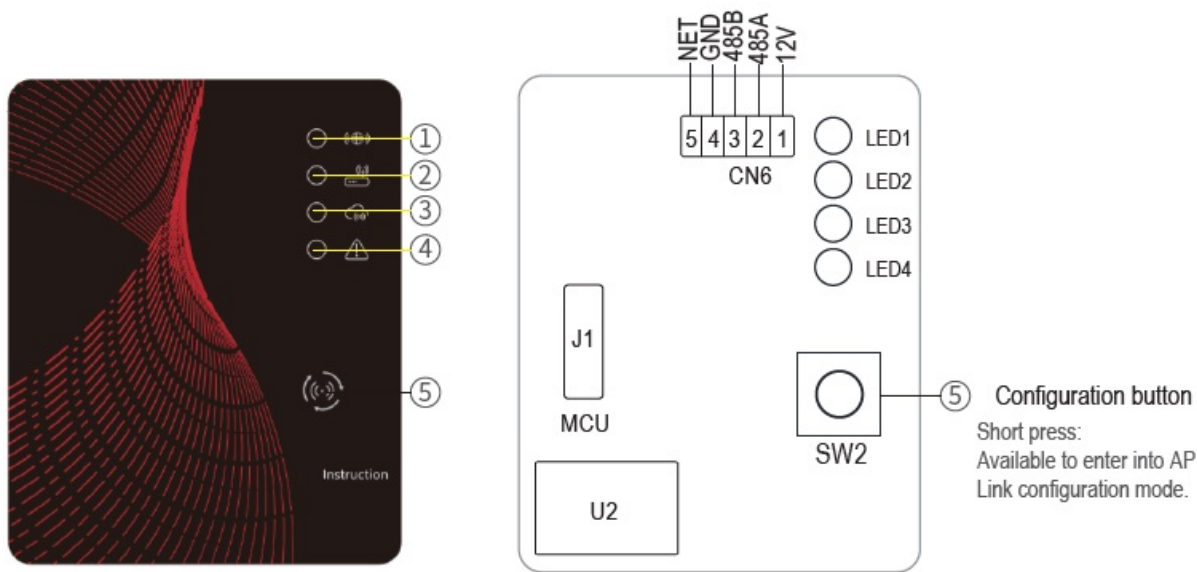
ITEM	NAME	LONG LIGHT	SLOW FLASH	EXTINGUISH
①	Network configuration indicator	Configuring Network	SmartLink configuring	Done
②	Router connection indicator	Normal	Abnormal	----
③	Cloud server connection indicator	Normal	Abnormal	----
④	485 communication indicator	Normal	Abnormal	----

Account Login

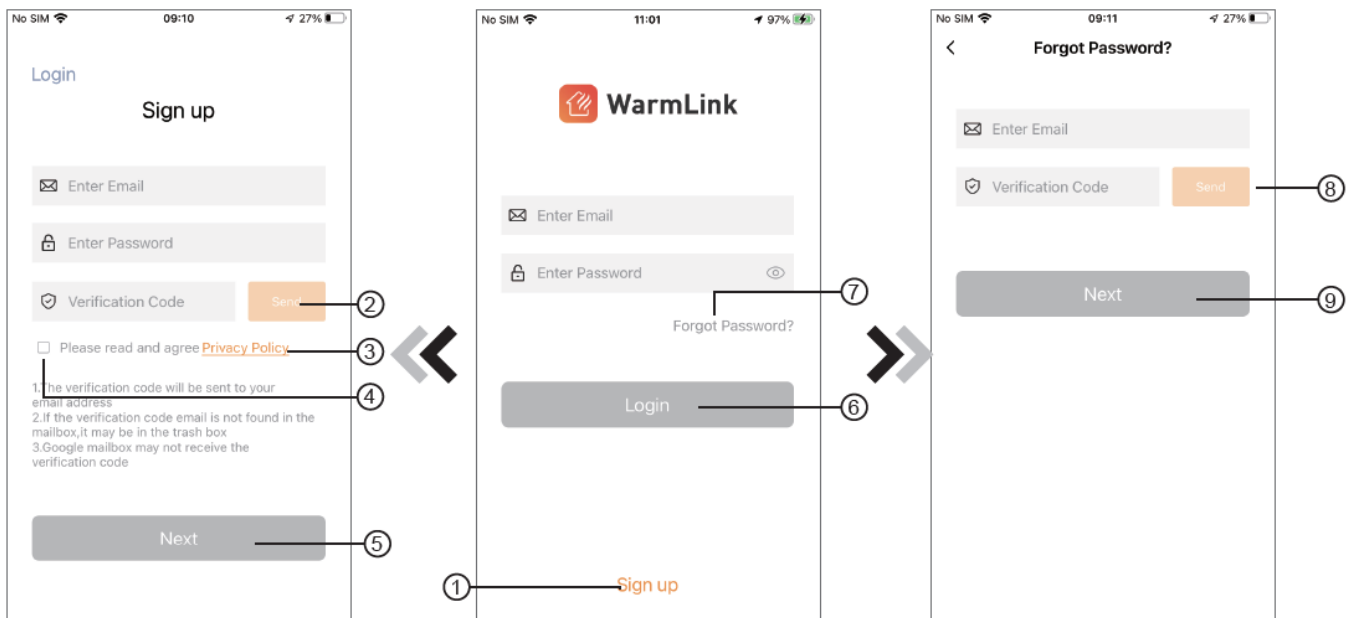- Use email address and password to register, login or reset the password.

Fig.2 Account Registration interface   Fig.1 Login interface   Fig.3 Forgot Password interface

1. Account Registration: To register an account, click 1 (Fig.1) to jump to the Account Registration interface, fill in the relevant information and click 2 to receive the verification code, after completing the application information, click 3 to read the details of the Privacy Policy, then click 4 to agree, and click 5 , registration is done.
Please note, the valid time of one verification code is 15 minutes, please fill in the verification code within 15 minutes, otherwise, you need to ask for a new one.
2. Log in: Follow the instructions on the page (Fig.1), enter your registered email address and password, click 6, and jump to the device list;
3. Forgot Password: If you forget your password, click 7 (Fig.1), jump to the Forgot Password interface (Fig.3). Follow the instructions on the page, fill in the relevant pieces of information, and click 8 to receive the verification code from your mailbox, click 9 to confirm and password reset is done.

Add Device

- After login, display My Device interface (Fig. 4), and follow the instructions to add WIFI.
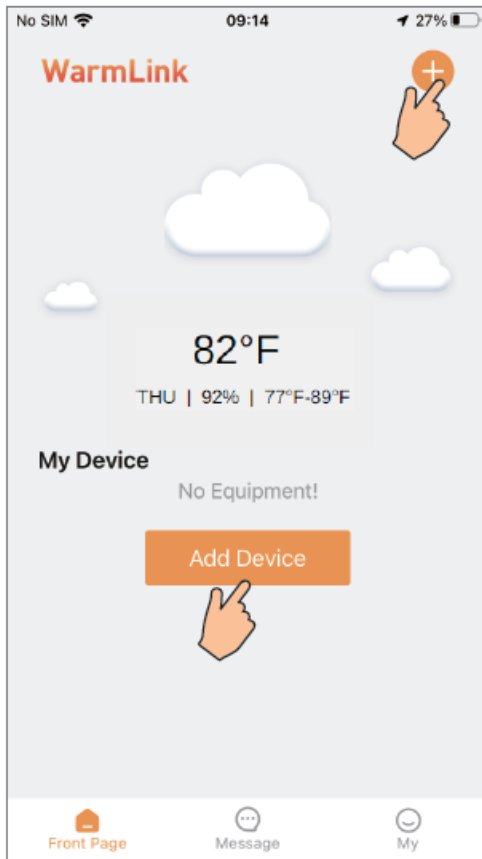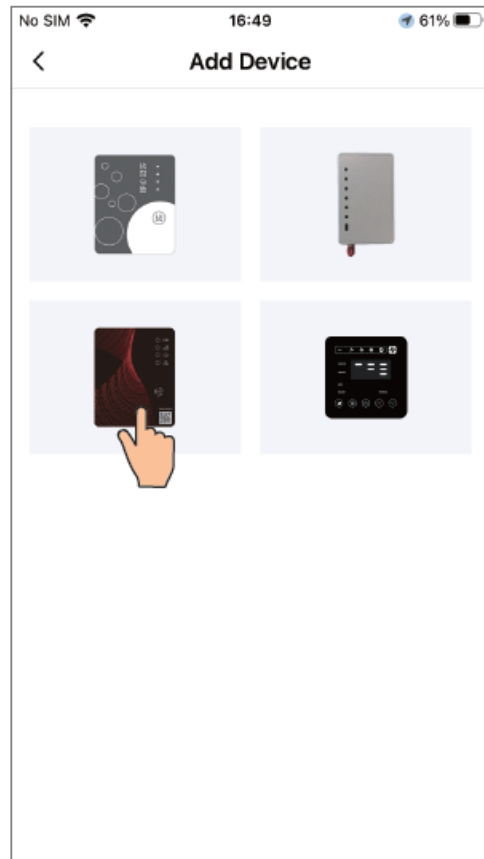
Fig.4 My Device interface

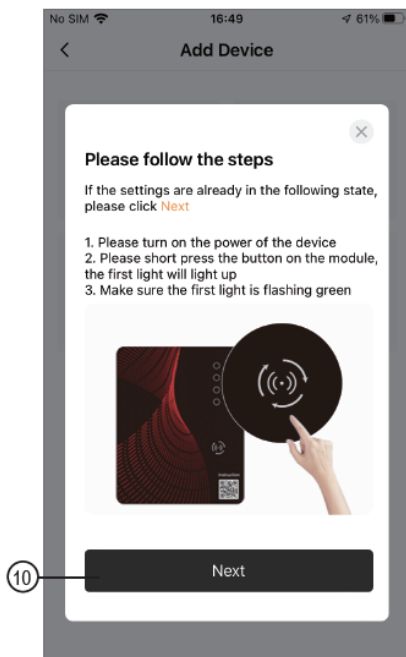Fig.5 Add Device interface

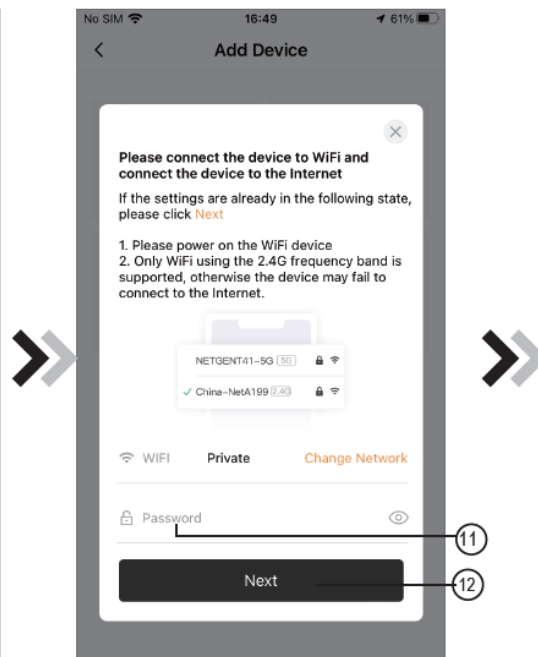## WIFI Configure Network

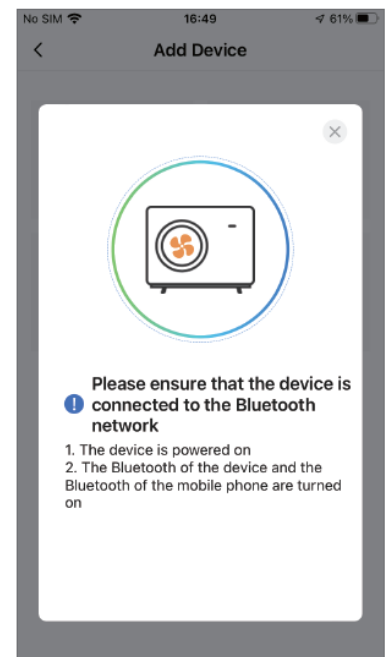Fig.6 WIFI Module On interface

Fig.7 Enter password interface

Fig.8 Searching device interface

1. Follow the instructions on the page (Fig.6), press the button on the module, and hold for 1 second until two lights are on, the AP connection is activated, click 10 to turn the page;

2. Click 11 to enter the WIFI password for the current connection, and click 12 to confirm;

3. The APP automatically searches for the WIFI module (Fig 8);

4. Click "To Scan" Fig.9 to allow the App to use the camera for scanning the WF code on the WIFI module (Fig.11.1), or click "Manual input" to enter the WF code (Fig.11.2).
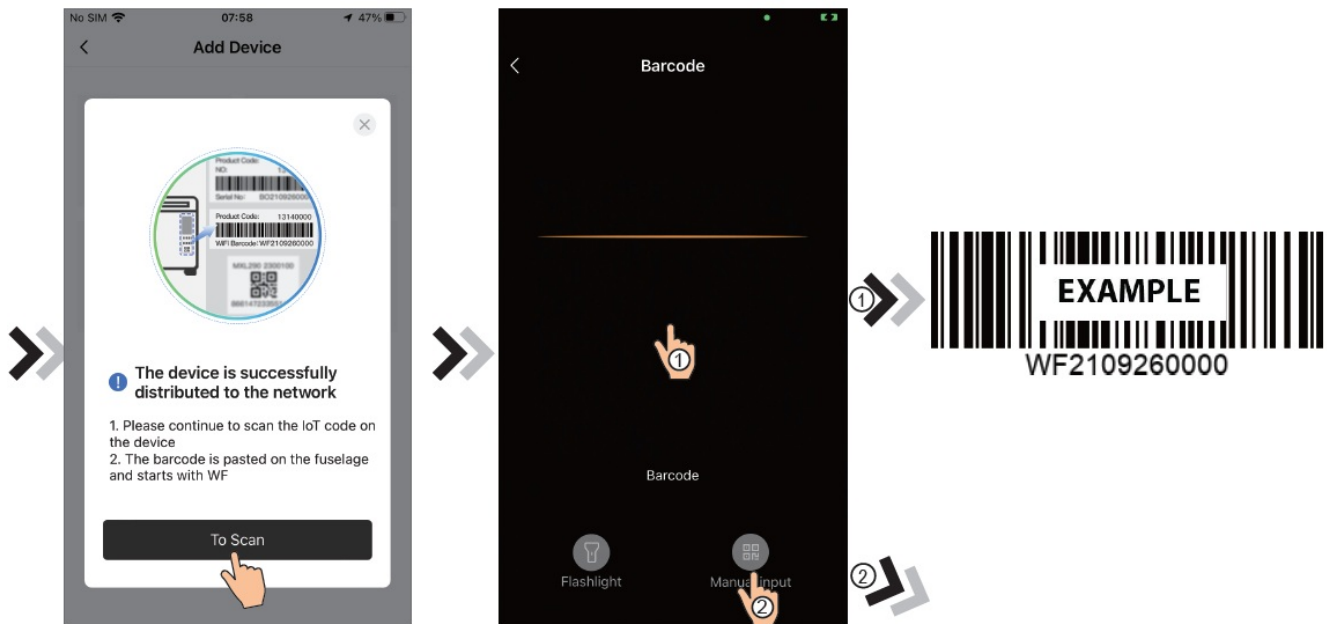
Fig.9 Bond device interface

Fig.10 Scanning interface

Fig.11.1 WF barcode
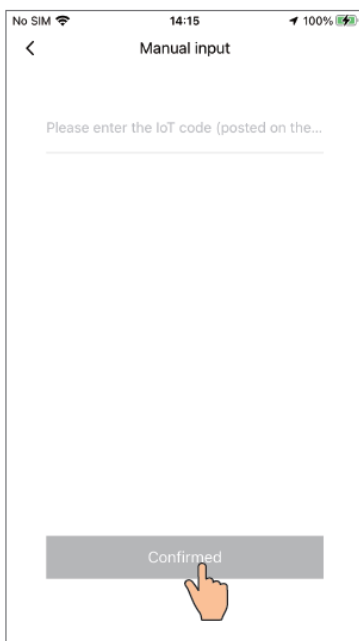
Fig.11.2 Manual input interface
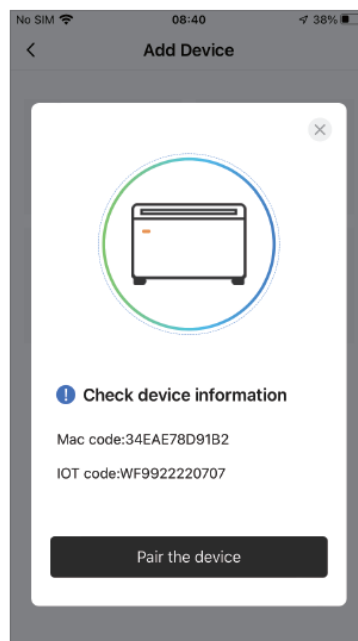
Fig.12 Bond Device interface. This should match the information in your specific unit.
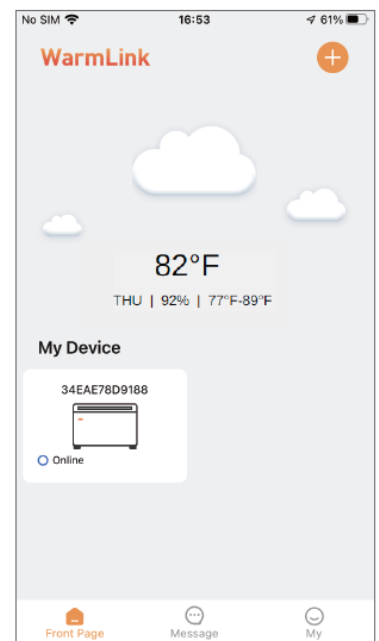
Fig.13 Device management interface

5. Click "Pair the device", device bond is done (Fig.12);

6. After WIFI bonding is done, jump back to My Device (Fig. 13).

Device Management

- Device management operations are as below :
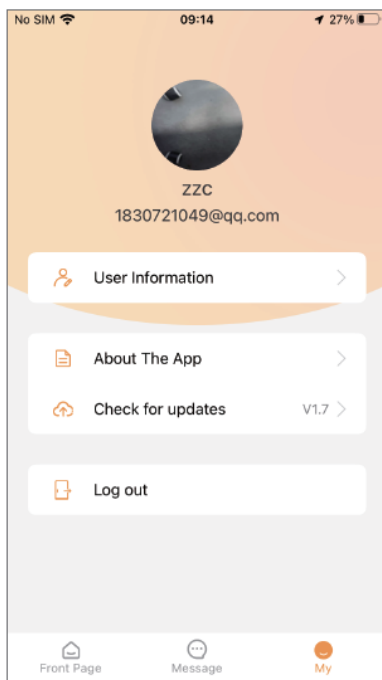
Fig.15 My information interface
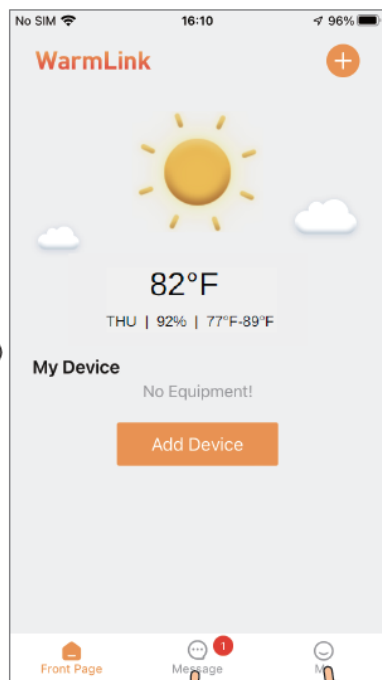
Fig.14 Device management interface
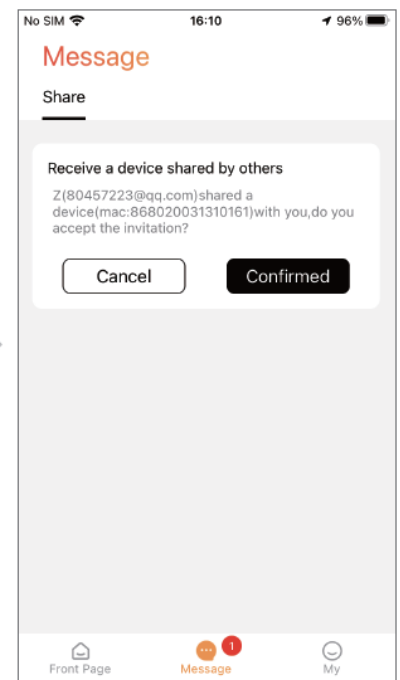
Fig.16 Share invitation data interface

Heating Device Control

- Guidelines for interface jumps
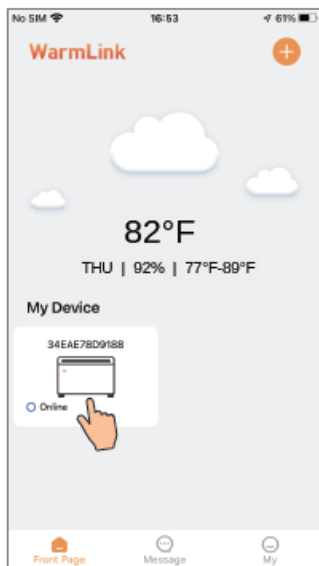
Fig.17 Device management interface
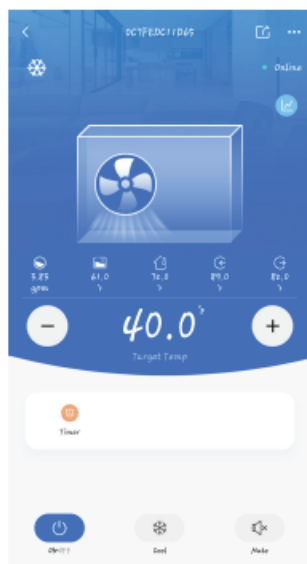
Fig.18 Device Main interface
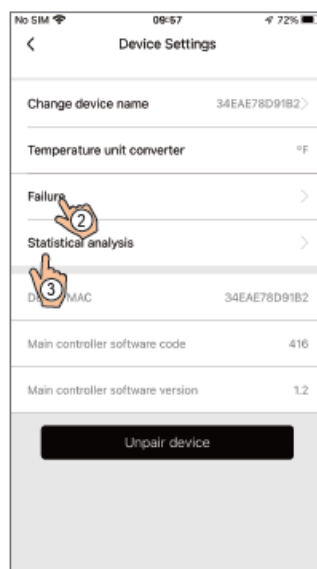
Fig.19 Setting interface
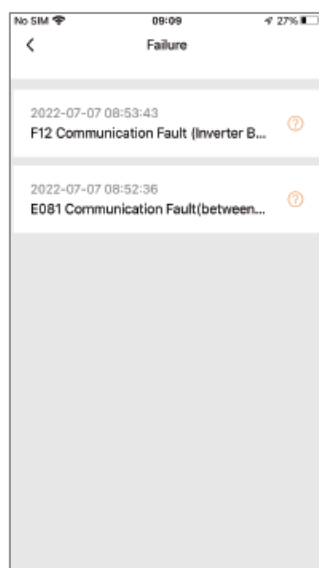
Fig.20 The failure interface

Fig.21 Statistical analysis interface
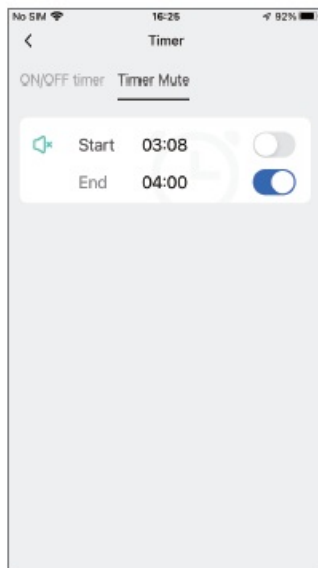
Fig.22 Time Mute interface

Fig.23 Device Main interface

Enter email account for device sharing
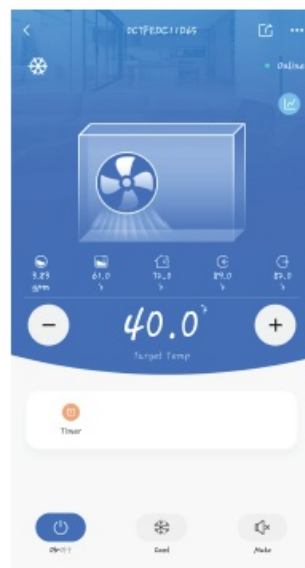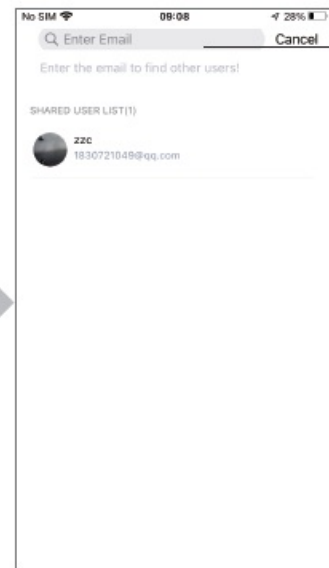
Fig.24 Device share interface
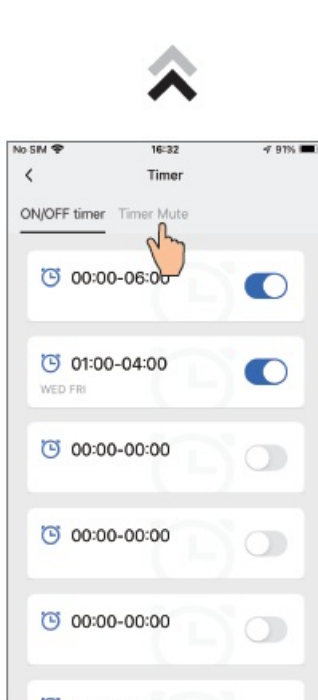
Fig.25 Timer Setting interface
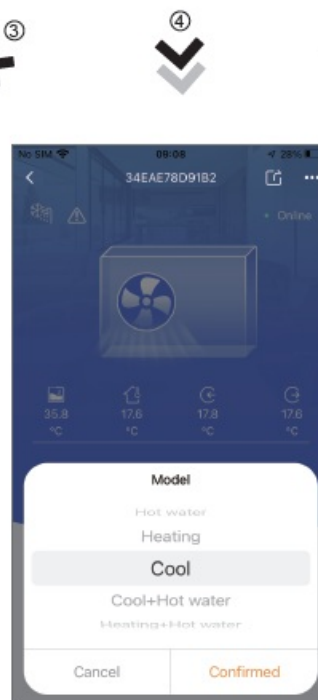
Fig.26 Mode switching interface
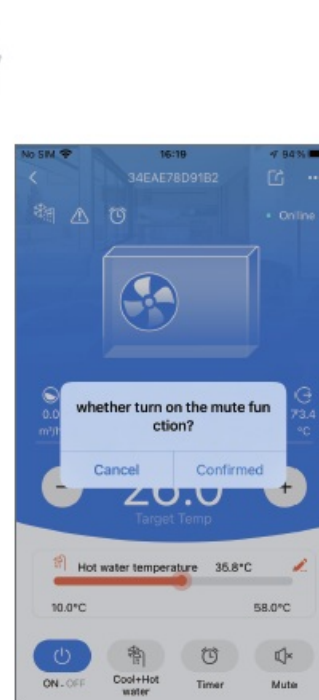
Fig. 27 Mute Setting interface

Fan Coil Device Control

- Guidelines for interface jumps
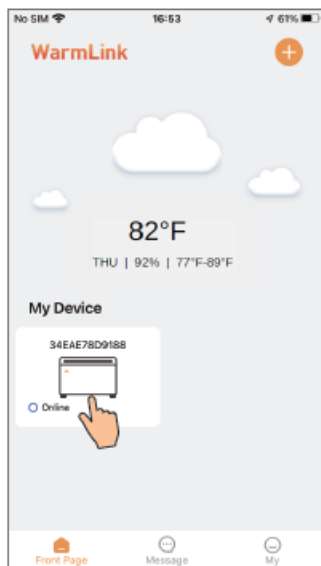
Fig.28 Device management interface
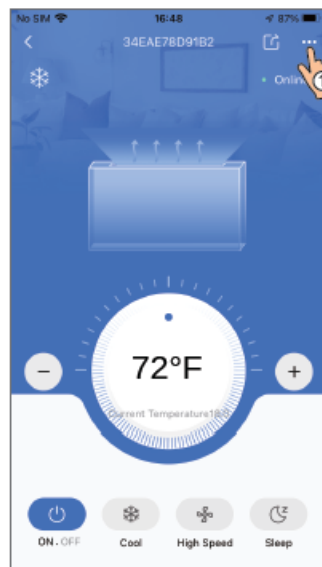
Fig.29 Device Main interface
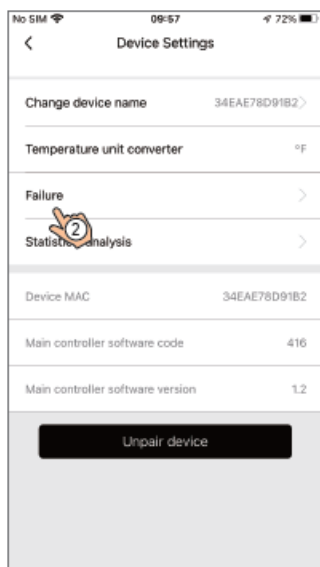
Fig.30 Setting interface
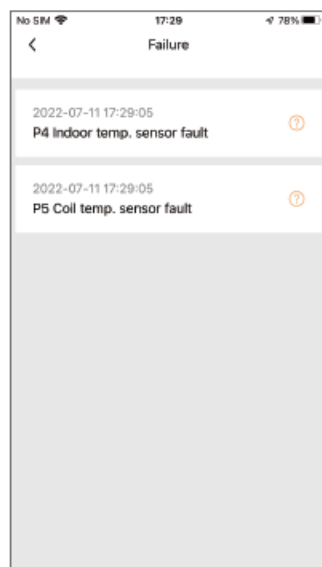
Fig.31 The failure interface

Fig.32 Device Main interface

Enter email account for device sharing
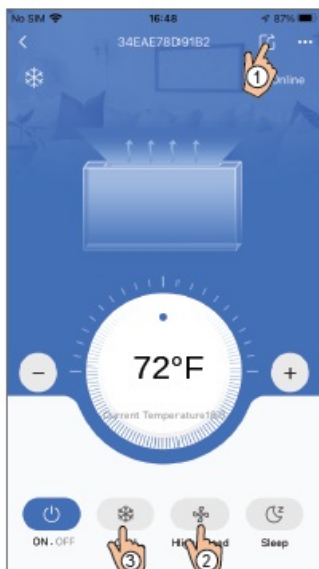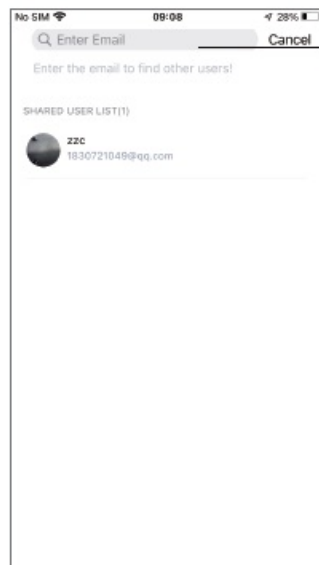
Fig.24 Device share interface
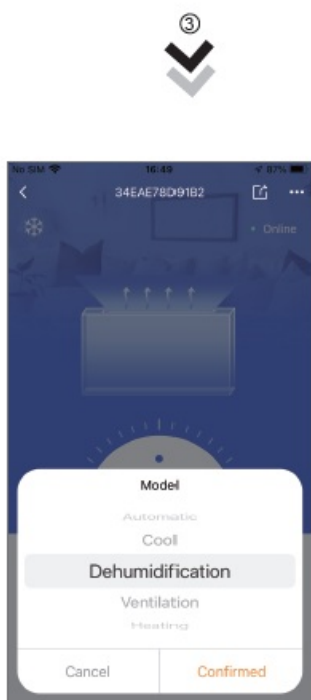
Fig.26 Mode switching interface
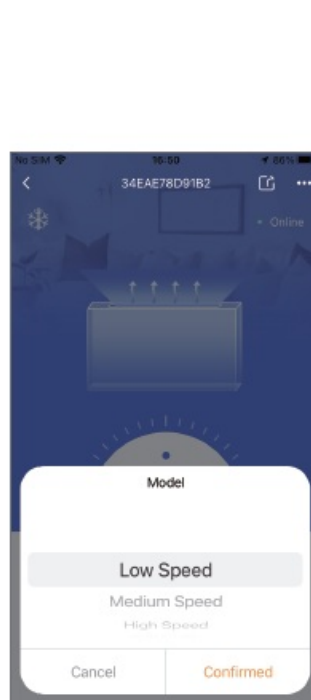
Fig. 27 Speed setting interface

| ICON	NAME	FUNCTIONS
	ON/ OFF	Click it to turn on/ off the unit
	Silent Mode Off/on	Displays mute mode. Click to switch mute mode
	Timers settings	Click to enter timer on/off
	Troubleshooting	Click to view device failure information
	heating and hot water	Select Save to change the working mode
	hot water	Select Save to change the working mode
	heating	Select Save to change the working mode
	refrigeration	Select Save to change the working mode
	refrigeration and hot water	Select Save to change the working mode
	Electric heating condition	Display electric heating status
	Defrost status	Display defrost status
	Water flow	Display water flow
	The environment temperature	Display ambient temperature
	water inlet temperature	Display inlet temperature
	Tank temperature	Display tank temperature
	Indoor temperature	Display room temperature (room temperature)
	hot water temperature	Display outlet water temperature
...	Setting	Click to change the functions setting of unit

MODBUS COMMUNICATIONS PROTOCOL

From: To: Vesion V2.1 update: 20230330

Transmission Format

Baud Rate	9600bps
Start bit	1
Byte width	8
Parity	N
Stop bits	1
Slave address	H10

Packet Format

Address	Function	Data	CRC checksum
16bits	16bits 03:Function of reading multi registers 16:Function of presenting multi registers	N*16bits	16bits

Data types

Data Types	Description
TEMP	have simple byte 0.1℃resolution formula T*10 temperature range :-30~97℃ When the temperature shows 25 ℃ the protocol data transmission is 250; When the temperature shows -25 ℃ the protocol data transmission is -250 when bit15 is 1 represents the negative number when the bit15 is 0 it represents Integer When the value is 32767, it represents the sensor failure
DIGI 1	No symbol byte unit:1 When showing 123, the data transmission is 123
DIGI 2	No symbol byte unit:10 When showing 1230, the data transmission is 123
DIGI 3	No symbol byte unit:100 When showing 12300, the data transmission is 123
DIGI 4	No symbol byte unit:5 When showing 10, the data transmission is 2
DIGI 5	No symbol byte unit:0.1 When showing 12.3, the data transmission is 123
DIGI 6	No symbol byte unit:0.001 When shows 0.123, the data transmission is 123
DIGI 9	No symbol byte unit:0.01 When shows 0.12, the data transmission is 12

Modbus address

C	Function	Number	Content	Byte length	Mode	Description	Remark	
1011	03/16		ON/OFF	double-byte	read/write	0-OFF/1-ON	DIGI1	

1012	03/16		Mode	double-byte	read/write	H05=1 0-Hot water/1-Heating/2-Cooling/3-Hot water+heating/4- Hot water+Cooling H05=0 0-Hot water/1-Heating/3-Hot water+heating	DIGI1	
1013	06		Water Tank Temp(Write in by Centralized Control when H37=1)	double-byte	read/write	(according to centralized control)	TEMP1	
1014	06		Allow heat pump get into defrost when D26=1	double-byte	read/write	0-not allow/1- allow	DIGI1	When D26=1 and needs to enter defrosting, the heat pump applies for defrosting first through address 2015 and then waits for the central controller to approve the defrost through address 1014. If it is still not approved for more than 8 minutes, the heat pump will forcibly enter defrost to prevent the frosting
1016	03/16		Manual Control	double-byte	read/write	bit0 Manual defrost(0-off 1-on) bit1 Mute flag bit (0-off 1-on) bit2 A key manual heating (0-off 1-on)	DIGI1	
1018	03/16	H01	Enable Power-off Memory	double-byte	read/write	0-no/1-yes	DIGI1	
1021	03/16	H05	Enable Cooling Function	double-byte	read/write	0-No/1-Yes	DIGI1	
1023	03/16	H07	Controller choice	double-byte	read/write	0-display control 1-remote control	DIGI1	

1024	03/16	H10	Unit address	double-byte	read/write	1~32	DIGI1	
1025	03/16	H38	Language choice	double-byte	read/write			
1028	03/16	H28	Heating/Cooling and Hot Water Function Enabled	double-byte	read/write	0-no/1-yes	DIGI1	
1029	03/16	H21	Temperature Unit	double-byte	read/write	0-°C/1-°F	DIGI1	
1030	03/16	H22	Enable Silent Mode	double-byte	read/write	0-no/1-yes	DIGI1	
1031	03/16	A35	Electric Heater OFF Temp. Diff	double-byte	read/write	0-30°C	TEMP1	
1032	03/16	H18	Electric Heater Stage	double-byte	read/write	1-Electric heater stage 1 2-Electric heater stage 2 3-Electric heater stage 3	DIGI1	
1033	03/16	H20	3-Way Valve Polarity	double-byte	read/write	0-ON on hot water mode/1-OFF on hot water mode	DIGI1	
1035	03/16	H25	Temp. Control Selection	double-byte	read/write	0-outlet water temp./1-room temp./2-buffer tank temp./3-inlet water temp.	DIGI1	
1036	03/16	H30	Enable Hydraulic Module	double-byte	read/write	0-no,1-yes	DIGI1	
1037	03/16	A03	Shutdown Ambient Temp.	double-byte	read/write	-40.0~10.0°C	TEMP1	
1038	03/16	A04	Antifreeze Temp.	double-byte	read/write	A22~10.0°C	TEMP1	
1043	03/16	A23	Min. Outlet Water Temp. Protect	double-byte	read/write	-30~20°C	TEMP1	
1044	03/16	A24	Excess Temp. Diff. Between Inlet and Outlet Temp.	double-byte	read/write	0~30°C	TEMP1	

1045	03/16	H32	Force Switch Mode Time	double-byte	read/write	1~180min		DIGI1	
1047	03/16	D26	Enable Centralized Control Defrosting Function	double-byte	read/write	0-no/1-yes		DIGI1	
1048	03/16	H37	Water Tank Temp Source	double-byte	read/write	0-water tank temp. sensor/1-centralized controller		DIGI1	
1049	03/16	A31	Electric Heater On AT	double-byte	read/write	-30~60℃		TEMP1	
1050	03/16	A32	Electric Heater Delays Comp. On-Time	double-byte	read/write	10~999min		DIGI1	
1053	03/16	A22	Min. Antifreeze Temp.	double-byte	read/write	-20℃~10℃		TEMP1	
1055	03/16	A25	Minimum Evaporation Temp. of Cooling	double-byte	read/write	-50℃~30℃		TEMP1	
1056	03/16	A27	Temp. Diff. of Limiting Frequency	double-byte	read/write	-20~20℃		TEMP1	
1057	03/16	A28	Temp. Diff. Between Outlet and DHW Temp.	double-byte	read/write	-20~20℃		TEMP1	
1063	03/16	A33	Electric Heater Opening Temp. Diff	double-byte	read/write	0~20℃		TEMP1	
1064	03/16	A34	Crank Preheating Time	double-byte	read/write	0~360min		DIGI1	
1087	03/16	F22	Enable Manual-control Fan Speed	double-byte	read/write	0-no/1-yes		DIGI1	
1089	03/16	F23	Rated DC Fan Motor Speed	double-byte	read/write	10~1300		DIGI1	
1103	03/16	F25	Max. Fan Speed in Cooling	double-byte	read/write	10~1300		DIGI1	

1104	03/16	F26	Max. Fan Speed in Heating	double-byte	read/write	10~1300	DIGI1	
1105	03/16	D01	Ambient Temp. of Starting Defrosting	double-byte	read/write	-37~45℃	TEMP1	
1106	03/16	D02	Heating Operation Time Before Defrosting	double-byte	read/write	0~120min	DIGI1	
1107	03/16	D03	Interval Time Between Defrosting Cycles	double-byte	read/write	30~90min	DIGI1	
1108	03/16	D04	Exhaust Temp. Correction for Defrosting Cycle	double-byte	read/write	0~150℃	TEMP1	
1109	03/16	D05-1	Defrosting Suction Pressure 1	double-byte	read/write	0~45bar	DIGI5	
1110	03/16	D05-2	Defrosting Suction Pressure 2	double-byte	read/write	0~45bar	DIGI5	
1111	03/16	D06	Defrosting Cycle Time Correction	double-byte	read/write	0~120min	DIGI1	
1112	03/16	D07	Ambient Temp. of Start Sliding Defrosting	double-byte	read/write	-37~45℃	TEMP1	
1113	03/16	D08	Suction Temp. of Start Sliding Defrosting	double-byte	read/write	-37~45℃	TEMP1	
1114	03/16	D09	Ambient Temp. of Stop Sliding Defrosting	double-byte	read/write	-37~45℃	TEMP1	
1115	03/16	D10	Suction Temp. of Stop Sliding Defrosting	double-byte	read/write	-37~45℃	TEMP1	
1116	03/16	D11	Min. Inlet Water Temp. of Defrosting	double-byte	read/write	4~65℃	DIGI5	
1117	03/16	D12	Suction Pressure of Forced Defrosting	double-byte	read/write	0~45bar	DIGI5	
1118	03/16	D13	Heating Operation Time Before Forced Defrosting	double-byte	read/write	0~240min	DIGI1	

1122	03/16	D17	Coil Temp. of Exit Defrosting	double-byte	read/write	-37~45℃	TEMP1	
1124	03/16	D19	Max. Defrosting Time	double-byte	read/write	0~20min	DIGI1	
1125	03/16	D20	Defrosting Frequency	double-byte	read/write	30-90Hz	DIGI1	

1126	03/16	D21	Enable Electric Heater During Defrosting	double-byte	read/write	(0-no/1-yes)	DIGI1	
1129	03/16	D24	Defrosting Water Tank Source When In Heating+DHW/Cooling+DHW Mode	double-byte	read/write	0- don't switch 1- DHW side(DHW tank) 2- Heating side(Buffer tank)	DIGI1	
1131	03/16	E01	EEV Adjust Mode	double-byte	read/write	0-Manual/1-Auto/2-Smart	DIGI1	
1133	03/16	E03	EEV Initial Steps for Heating	double-byte	read/write	0~500N	DIGI1	
1138	03/16	E08	EEV Initial Steps for Cooling	double-byte	read/write	0~500N	DIGI1	
1139	03/16	E09	EVI EEV: Adjustment Mode	double-byte	read/write	0-Manual/1-Auto	DIGI1	
1140	03/16	E10	EVI EEV: Initial Steps	double-byte	read/write	0~500N	DIGI1	
1152	03/16	G01	Disinfection Water Temp.	double-byte	read/write	60~70℃	TEMP1	
1153	03/16	G02	Time Duration of Disinfection	double byte	read/write	0~60min	DIGI1	
1154	03/16	G03	Disinfection Starting Time	double byte	read/write	0~23h	DIGI1	
1155	03/16	G04	Interval Period of Disinfection	double byte	read/write	1~30days	DIGI1	

1156	03/16	G05	Enable Disinfection	double byte	read/write	0-no/1-yes	DIGI1	
1157	03/16	R01	Domestic Hot Water / DHW Target Temp.	double byte	read/write	R36-R37	TEMP1	
1158	03/16	R02	Heating Target Temp.	double byte	read/write	R10~R11	TEMP1	
1159	03/16	R03	Cooling Target Temp.	double byte	read/write	R08~R09	TEMP1	
1160	03/16	R04	Temp. Diff. for Power-on in Heating	double byte	read/write	0~10°C	TEMP1	
1161	03/16	R05	Temp. Diff. for Standby in Heating	double byte	read/write	0~10°C	TEMP1	
1162	03/16	R08	Min. Cooling Target Temp.	double byte	read/write	-30.0~R09	TEMP1	
1163	03/16	R09	Max. Cooling Target Temp.	double byte	read/write	R08~80.0	TEMP1	
1164	03/16	R10	Min. Heating Target Temp.	double byte	read/write	-30.0~R11	TEMP1	
1165	03/16	R11	Max. Heating Target Temp.	double byte	read/write	R10~99	TEMP1	
1173	03/16	R35	Location of Electric Heater	double byte	read/write	0-no use/1-water loop heater /2-water tank heater/buffer tank heater	DIGI1	
1174	03/16	R06	Temp. Diff. for Power-on in Cooling	double byte	read/write	0.0~10.0°C	TEMP1	
1175	03/16	R07	Temp. Diff. for Standby in Cooling	double byte	read/write	0.0~10.0°C	TEMP1	
1176	03/16	R36	Min. DHW Target Temp.	double byte	read/write	0~R37°C	TEMP1	
1177	03/16	R37	Max. DHW Target Temp.	double byte	read/write	R36~75°C	TEMP1	

1192	03/16	R39	AT for Auto-start Heating Mode	double byte	read/write	5~20℃	TEMP1	
1195	03/16	R16	Temp. Diff. for Power-on in DHW	double byte	read/write	0~10℃	TEMP1	
1196	03/16	R17	Temp. Diff. for Standby in DHW	double byte	read/write	0~10℃	TEMP1	
1197	03/16	P01	Main Circulation Pump Operation Mode	double byte	read/write	0-Normal/1-Economic/2-Interval	DIGI1	
1198	03/16	P02	Interval Time	double byte	read/write	1~120min	DIGI1	
1199	03/16	P03	Operation Duration Time	double byte	read/write	1~30min	DIGI1	
1201	03/16	P05	DHW Pump Operation Mode	double byte	read/write	0-Normal/1-Economic/2-Interval	DIGI1	
1202	03/16	P06	Main Circulation Pump Manual Control	double byte	read/write	0-OFF/1-ON	DIGI1	
1203	03/16	P09	Interval Period of Enable Water Pump Protection Mode	double byte	read/write	0~30days	DIGI1	
1205	03/16	P10	Water Pump Speed	double byte	read/write	0-100%		
1218	03/16	C01	Manual Comp. Frequency	double byte	read/write	0~120Hz	DIGI1	
1220	03/16	C03	Max. Comp. Frequency	double byte	read/write	30~120Hz	DIGI1	
1227	03/16	C10	Min. Comp. Frequency in Heating at Low Ambient Temp.	double byte	read/write	0~120Hz	DIGI1	
1228	03/16	R42	Max. Outlet Water Temp. in Heating	double byte	read/write	20~60℃	TEMP1	
1231	03/16	R45	AT to Start Electric Heater Without Delay	double byte	read/write	-50~20℃	TEMP1	

1232	03/16	R46	Temp. Diff. between Max. DHW Target Temp. & Max.	double byte	read/write	0~15℃		TEMP1	
1236	03/16	H36	Weather compensation function enables during heating	double byte	read/write	0-no,1-yes		DIGI1	
1239	03/16	R70	Target Room Temp.	double byte	read/write	5~27℃		TEMP1	
1240	03/16	R71	Temp. Diff. for Power-on in Heating	double byte	read/write	0.1~3℃		TEMP1	
1241	03/16	R72	Temp. Diff. for Standby in Heating	double byte	read/write	0.1~3℃		TEMP1	
1242	03/16	R73	Temp. Diff. for Power-on in Cooling	double byte	read/write	0.1~3℃		TEMP1	
1243	03/16	R74	Temp. Diff. for Standby in Cooling	double byte	read/write	0.1~3℃		TEMP1	
1256	03/06	KG1	The first segment of timed on/off start time (high eight bits: hours, low eight bits: minutes)	double byte	read/write			DIGI1	
1257	03/06	KG2	The first segment of time on/off end time (high eight bits: hours, low eight bits: minutes)	double byte	read/write			DIGI1	
1258	03/06	KG3	The second segment of time on/off start time (high eight bits: hours, low eight bits: minutes)	double byte	read/write			DIGI1	
1259	03/06	KG4	The second segment of time on/off end time (high eight bits: hours, low eight bits: minutes)	double byte	read/write			DIGI1	
1260	03/06	KG5	The third segment of time on/off start time (high eight bits: hours, low eight bits: minutes)	double byte	read/write			DIGI1	

1261	03/06	K G6	The third segment of time on/off end time (high eight bits: hours, low eight bits: minutes)	double byte	read/write		DIGI1	
1262	03/06	K G7	The fourth segment of time on/off start time (high eight bits: hours, low eight bits: minutes)	double byte	read/write		DIGI1	
1263	03/06	K G8	The fourth segment of time on/off end time (high eight bits: hours, low eight bits: minutes)	double byte	read/write		DIGI1	
1264	03/06	K G9	The fifth segment of time on/off start time (high eight bits: hours, low eight bits: minutes)	double byte	read/write		DIGI1	
1265	03/06	K G10	The fifth segment of time on/off end time (high eight bits: hours, low eight bits: minutes)	double byte	read/write		DIGI1	
1266	03/06	K G11	The sixth segment of time on/off start time (high eight bits: hours, low eight bits: minutes)	double byte	read/write		DIGI1	
1267	03/06	K G12	The sixth segment of time on/off end time (high eight bits: hours, low eight bits: minutes)	double byte	read/write		DIGI1	

| 1268 | 03/06 | KG13~KG28 | bit0:whether the first timer switch is enabled on Monday bit1:Whether the first timer switch is enabled on Tuesday bit2:Whether the first timer switch is enabled on Wednesday

bit3:Whether the first timer switch is enabled on Thursday bit4:Is the first period of timer switch Friday enabled or not bit5:Is the first timer switch on Saturday enabled

bit6:Is the first timer switch on Sunday enabled bit7:Whether the first timer switch is enabled or not bit8:Whether the second timer switch is enabled on Monday

bit9:Whether the second timer switch is enabled on Tuesday

bit10:Whether the second timer switch is enabled on Wednesday

bit11:Whether the second timer switch is enabled on Thursday

bit12:Is the second period of the timer switch on Friday enabled bit13:Is the second period of the timer switch on Saturday enabled

bit14:Is the second period of the timer switch on/off Sunday enabled bit15:Whether the second timer is enabled or not | double byte | read/write | 0-no/1-yes | DIGI1 | |

1269	03/06	KG29~KG44	bit0:Whether the third timer switch is enabled on Monday bit1:Whether the third timer switch is enabled on Tuesday bit2:Whether the third timer switch is enabled on Wednesday bit3:Whether the third timer switch is enabled on Thursday bit4:Is the third period of timer switch Friday enabled bit5:Is the third timer switch on Saturday enabled bit6:Is the third period of timer switch on Sunday enabled bit7:Whether the third timer switch is enabled or not bit8:Whether or not the fourth timer switch is enabled on Monday bit9:Whether or not the fourth timer is enabled on Tuesday bit10:Whether or not the fourth timer is enabled on Wednesday bit11:Whether or not the fourth timer switch is enabled on Thursday bit12:Is the fourth segment timer on/off Friday enabled bit13:Is the fourth segment timer switch on Saturday enabled bit14:Is the fourth segment timer switch on/off Sunday enabled bit15:Whether or not the fourth timer is enabled	double byte	read/write	0-no/1-yes	DIGI1	

1270	03/06	KG45~KG60	bit0:Whether the fifth timer switch is enabled on Monday bit1:Whether or not the fifth timer switch is enabled on Tuesday bit2:Whether or not the fifth timer is enabled on Wednesday bit3:Whether or not the fifth timer is enabled on Thursday bit4:Is the fifth period of timer switch Friday enabled bit5:Is the fifth segment timer switch on Saturday enabled bit6:Whether the fifth timer switch is enabled on Sunday bit7:Whether the fifth timer is enabled or not bit8:Is the sixth segment timer switch on Monday enabled bit9:Whether or not the sixth timer is enabled on Tuesday bit10: Whether or not the sixth timer is enabled on Wednesday bit11:Whether or not the sixth segment timer switch is enabled on Thursday bit12:Is the sixth segment timer on/off Friday enabled bit13:Is the sixth segment timer switch on Saturday enabled bit14:Is the sixth period of the timer switch Sunday enabled bit15:Whether or not the sixth timer is enabled	double byte	read/write	0-no/1-yes	DIGI1	
2011	16		Unit state	double byte	read	0-off/1-on	DIGI1	
2012	16		Unit mode	double byte	read	0-cooling/1-heating/2-defrost/3-sterilize/4-hot water	DIGI1	

201 3	16		Temperature value after limiting	doub le by te	rea d		TEMP1	
201 4	16		Temperature value after weather compensation during heating	doub le by te	rea d		TEMP1	
201 5	16		Apply for Centralized Co ntrol Defrosting Mode	doub le by te	rea d	0-no/1-defrosting mode avai lable	DIGI1	
201 8	16	O2 5	Load output(Water Tank Electric Heater)	doub le by te	rea d	0-off/1-on	DIGI1	
201 9	16	O0 1~ O2 3	Load output	doub le by te	rea d	bit0 O01 compressor output 0-OFF/1-ON bit1 Re served bit2 O03 fan high speed out put 0-OFF/1-ON bit3 O04 f an low speed output 0-OFF/ 1-ON bit4 O05 water pump output 0-OFF/1-ON bit5 O0 6 hot water pump output 0- OFF/1-ON bit6 O07 4 way valve 1 0-OFF/1-ON bit7 O 08 Electric heater stage 1 0- OFF/1-ON bit8 O09 Electric heater stage 2 0-OFF/1-ON bit9 O10 3 way valve 0-OFF /1-ON bit10 O11 alarm outp ut 0-OFF/1-ON bit11 O12 C rankcase Heater 0-OFF/1-ON bit12 O13 Pan heater 0-OF F/1-ON bit13 O21 heating water pump 0-OFF/1-ON bit14 O22 Hydraulic module water loop electric heater 0- OFF/1- ON bit15 O23 Hydraulic module DHW tank electric heater 0- OFF/1- ON	DIGI1	

2020	16	O15	EEV Steps	double byte	read	0~500N		DIGI1	
2022	16	O17	EVI EEV Steps	double byte	read	0~500N		DIGI1	
2029	16	T52	InputCurrent1	double byte	read			DIGI5	Current transformer 1
2030	16	T53	InputCurrent2	double byte	read			DIGI5	Current transformer 2
2031	16	T54	InputCurrent2	double byte	read			DIGI5	Current transformer 3
2034	16	S01~ S10	Switch state	double byte	read	bit0 S01 High pressure switch 0-on/1-off bit1 S02 Low pressure switch 0-on/1-off bit2 S03 Water flow switch 0-on/1-off bit3 S04 Electric heater over heat switch 0-on/1-off bit4 S05 Remote ON/OFF 0-on/1-off bit5 S06 Remote heating/cooling 0-on/1-off bit6 S07 Hot water switch 0-on/1-off bit7 Reserved bit8 Reserved bit9: Heating/cooling ON/OFF 0-on/1-off bit10 Reserved bit11 Reserved bit12 Reserved bit13 Reserved bit14 Reserved bit15 Reserved		DIGI1	
2035	16	T40	Heating Returning Water Temp.	double byte	read	real test value		TEMP1	Only enable when connecting the hydraulic module
2036	16	T41	Heating Leaving Water Temp.	double byte	read	real test value		TEMP1	Only enable when connecting the hydraulic module

2037	16	T42	Mix Tube Outlet Water Temp.	double byte	read	real test value	TEMP1	Only enable when connecting the hydraulic module
2038	16	T43	DHW Returning Water Temp.	double byte	read	real test value	TEMP1	Only enable when connecting the hydraulic module
2039	16	T44	DHW Leaving Water Temp.	double byte	read	real test value	TEMP1	Only enable when connecting the hydraulic module
2042	16	T36	Phase Current of Compressor	double byte	read	real test value	DIGI5	
2043	16	T37	DC Power Bus Voltage	double byte	read	real test value	DIGI1	
2044	16	T38	IPM Temp..	double byte	read	real test value	TEMP1	
2045	16	T01	Inlet Water Temp.	double byte	read	real test value	TEMP1	
2046	16	T02	Outlet Water Temp.	double byte	read	real test value	TEMP1	
2047	16	T08	DHW Tank Temp.	double byte	read	real test value	TEMP1	
2048	16	T04	Ambient Temp. (AT)	double byte	read	real test value	TEMP1	
2049	16	T03	Coil Temp.	double byte	read	real test value	TEMP1	
2051	16	T05	Suction Temp.	double byte	read	real test value	TEMP1	
2052	16	T07	Buffer Tank Temp.	double byte	read	real test value	TEMP1	
2053	16	T12	Exhaust Temp.	double byte	read	real test value	TEMP1	

2055	16	T06	Antifreeze Temp.	double byte	read	real test value	TEMP1	

2057	16	T35	AC Input Current	double byte	read	real test value	DIGI5	
2058	16	T09	Room Temp.	double byte	read	real test value	TEMP1	Valid only if H25=1, now replaced by multi-zone control
2061	16	T33	IPM High Fault Temp.	double byte	read	real test value	TEMP1	
2062	16	T34	AC Input Voltage	double byte	read	real test value	DIGI1	
2063	16	T10	EVI Inlet Temp.	double byte	read	real test value	TEMP1	
2064	16	T11	EVI Outlet Temp.	double byte	read	real test value	TEMP1	
2065	16	T49	Evaporation temperature	double byte	read	real test value	TEMP1	
2066	16	T50	Exhaust Superheat	double byte	read	real test value	TEMP1	
2067	16	T51	Suction Superheat	double byte	read	real test value	DIGI5	
2069	16	T15	Low Pressure	double byte	read		DIGI5	
2071	16	T30	Target Compressor Frequency	double byte	read	real test value	DIGI1	
2072	16	T31	Operation Frequency of Compressor	double byte	read	real test value	DIGI1	
2073	16	T32	Max. Frequency from Comp. Driver	double byte	read	real test value	DIGI1	
2074	16	T27	Speed of Fan Motor 1	double byte	read	real test value	DIGI1	

2075	16	T28	Speed of Fan Motor 2	double byte	read	real test value	DIGI1	
2076	16	T29	Target Speed of Fan Motor	double byte	read	real test value	DIGI1	
2077	16	T39	Water Flow Rate	double byte	read	real test value	DIGI9	
2078	16		Power Consumption	double byte	read	High 16 KW*h	DIGI1	Energy consumption, in kW-h, is a
2079	16		power Consumption	double byte	read	Low 16	DIGI1	32-bit data, need to amount 2078 (high 16 bits) and 2079 (low 16
2081	16		Failure 7	double byte	read	bit0: IPM overheat bit1: compressor start failure bit2: compressor over currents bit3: Input voltage phase loss bit4: IPM current sampling fault bit5: Overheat protection of drive board devices bit6: Pre-charge failure bit7: DC busbar overvoltage bit8: DC bus undervoltage bit9: AC input voltage under voltage bit10: AC input overcurrent shutdown bit11: Input voltage sampling fault bit12: DSP and PFC communication failure bit13: Drive plate temperature fault bit14: DSP and communication board communication failure bit15: mainboard communication failure	DIGI1	

| 2082 | 16 | | Failure 8 | double byte | read | bit0: IPM overheat stop bit1 compressor default phase bit2 Reserved

Bit3: The input current sampling is faulty

bit4 Reserved bit5 Reserved bit6 EEPROM fault

bit7 Input voltage over limiting protection bit8 Reserved

bit9 Reserved bit10 Reserved bit11 Reserved bit12 Reserved bit13 Reserved bit14 Reserved

bit15 Compressor overspeed protection | DIGI1 | |
| 2083 | 16 | | Failure 9 | double byte | read | bit0: Voltage electromechanical current down frequency alarm bit1: Compressor weak magnetic protection alarm

bit2: Power unit overheating alarm bit3: Reserved

bit4: AC input current down alarm bit5: EEPROM failure warning bit6: Reserved

bit7: Burned E2 Prohibited start fault bit8: Reserved

bit9: Reserved bit10:Reserved bit11:Reserved bit12:Reserved bit13:Reserved bit14:Reserved bit15:Reserved | DIGI1 | |

2084	16		Fault 10 (fault of external drive fan)	double byte	read	Bit0:Reserved Bit1:Reserved Bit2:Reserved Bit3:Reserved Bit4:Reserved Bit5:Reserved Bit6:Reserved Bit7:Reserved Bit8:Temperature sensor fault Bit9:IPM overtemperature protection Bit10:IPM hardware overcurrent protection Bit11:Phase loss protection Bit12:Current sampling fault Bit13:Start-up failure (zero speed) Bit14:Software Overcurrent Bit15:Overspeed protection	DIGI1	
2085	16		Failure 1	double byte	read	bit0 Reserved bit1 Reserved bit2 Heating return temp sensor failure 0-no/1-yes bit3 Heating outlet water temp sensor failure(0-no/1-yes) bit4 High pressure protection 0-no/1-yes bit5 Low ambient temperature does not allow cooling protection 0-no/1-yes bit6 Low pressure protection 0-no/1-yes bit7 Defrost flow shortage warning 0-no/1-yes bit8 water flow protection 0-no/1-yes bit9 Electric heating overload protection 0-no/1-yes bit10 Winter first class anti-freeze protection 0-no/1-yes bit11 Winter second class anti-freeze protection 0-no/1-yes bit12 anti-freeze protection 0-no/1-yes bit13 Reserved bit14 Room temp failure 0-no/1-yes bit15 Reserved	DIGI1	

| 2086 | 16 | | Failure 2 | double byte | read | bit0 Exhaust temperature overprotection 0-no/1-yes bit1 Reserved

bit2 Reserved

bit3 Fan 1 overload speed limit 0-no/1-yes bit4 Fan 2 overload speed limit 0-no/1-yes

bit5 The temp difference of inlet water and outlet water over large protection 0-no/1-yes

bit6 Outlet water over heat (0-no/1-yes)

bit7 Mixing outlet water temp sensor failure(0-no/1-yes) bit8 Hot water return temp sensor failure (0-no/1-yes) bit9 Hot water outlet water temp sensor failure(0-no/1-yes) bit10 Reserved

bit11 Reserved bit12 Reserved bit13 Reserved bit14 Reserved bit15 Reserved | DIGI1 | |
| 2087 | 16 | | Failure 3 | double byte | read | bit0 Reserved bit1 Reserved bit2 Reserved bit3 Reserved

bit4 high pressure protection 3 times 0-no/1-yes bit5 Reserved

bit6 low pressure protection 3 times 0-no/1-yes bit7 Reserved

bit8 water flow protection 3 times 0-no/1-yes bit9 Electric heating protection 3 times 0-no/1-yes bit10 Reserved

bit11 Reserved

bit12 Anti-freeze protection 3 times 0-no/1-yes bit13 Reserved

bit14 Reserved bit15 Reserved | DIGI1 | |

2088	16		Failure 4	double byte	read	bit0 Discharge overheat protection 3 times 0-no/1-yes bit1 Reserved bit2 The temp difference of inlet water and outlet water temp over large 3 times 0-no/1-yes bit3 The outlet water temp too lower 3 times 0-no/1-yes bit4 Outlet water over-temp protection 3 times 0-no/1-yes bit5 Reserved bit6 Reserved bit7 Reserved bit8 Reserved bit9 Reserved bit10 Reserved bit11 Reserved bit12 Reserved bit13 Reserved bit14 Reserved bit15 Reserved	DIGI1	
2089	16		Failure 5	double byte	read	bit0 Inlet water temp failure 0-no/1-yes bit1 Outlet water temp failure 0-no/1-yes bit2 Coil temp failure 0-no/1-yes bit3 Ambient temp failure 0-no/1-yes bit4 Suction temp failure 0-no/1-yes bit5 Anti-freeze temp failure 0-no/1-yes bit6 The coil outlet water temp sensor failure 0-no/1- yes (reserved) bit7 System 1 buffer tank temperature sensor fault (0-no/1-yes) bit8 Reserved bit9 EVI inlet temp failure 0-no/1-yes bit10 EVI outlet temp failure 0-no/1-yes bit11 discharge temp failure 0-no/1-yes bit12 Reserved bit13 Syetem 1 pressure sensor failure 0-no/1-yes bit14 low ambient temp failure 0-no/1-yes bit15 Outlet temp too low protection 0-no/1-yes	DIGI1	

2090	16		Failure 6	double byte	read	bit0 Reserved bit1 Reserved bit2 Reserved bit3 Reserved bit4 Reserved bit5 Reserved bit6 Reserved bit7 Reserved bit8 Hot water temp failure 0-no/1-yes bit9 Reserved bit10 Reserved bit11 Fan 1 failure 0-no/1-yes bit12 Fan 2 failure 0-no/1-yes bit13 Communication failure (main board with fan motor module board) 0-no/1-yes bit14 Communication failure with hydronic module bit15 Communication failure(main board with fan motor 2 module board) 0-no/1-yes	DIGI1	
2130	16	T46	External Fan Motor Driver IPM Temp.	double byte	read		DIGI5	
2131	16	T47	External Fan Motor Driver Power	double byte	read		DIGI1	
2132	16	T48	Exernal Fan Motor Driver Current	double byte	read		DIGI6	
2133-2180	16		Reserved	double byte	read			

IMPORTANT NOTICE

PRODUCT REGISTRATION & EXTENDED WARRANTY

Extended Warranty Requirements

- Project/Equipment Registration
- Active SpacePak Certified Contractor Status at Time of Installation

To visit the Product Registration Page, click or scan the QR code.

CLICK or SCAN

Are You Certified?

- Check our Contractor Locator map to find out.

Benefits of Becoming a SpacePak Certified Contractor:

- Local Leads
- Listed on SpacePak Website
- Sales & Marketing Support
- Pre-Sale Application Support & Load Calculations
- Extended Warranty

SpacePak Offers Factory Authorized Training for Certification On:

- Small Duct High-Velocity Equipment
- Air-to-Water Heat Pump & Hydronic Equipment

Available Training Certification – Methods Include:

- Online Webinar Training
- Local Field Training
- Corporate Headquarters Factory Training

For All Training Inquiries, Contact Your Local Spacepak Manufacturers Representative:
https://www.spacepak.com/RepLocator

Limited Warranty Statement
SpacePak "Solstice Inverter"* Series Air to Water Heat Pumps

Subject to the terms and conditions of this Limited Warranty Statement (the "Limited Warranty"), SpacePak warrants to the original purchaser of the "Solstice Inverter" Series that:

1. The parts are warranted for two (2) years to the original owner of the System (as such term is defined in part (4) below). If any parts should prove defective due to improper workmanship and/or material for two (2) years from the date of installation, SpacePak will replace any defective part without charge for that part. Replacement parts are warranted for the remainder of the original 2-year warranty period. Parts used as replacement may be of like kind and quality and may be new or remanufactured. Defective parts must be available for SpacePak in exchange for the replacement parts and become the property of SpacePak.

2. The compressor is warranted for five (5) years to the original owner of the System. If the compressor should prove defective due to improper workmanship and/or material for five (5) years from the date of installation, SpacePak will replace the defective compressor without charge for the compressor. Replacement compressors are warranted for the remainder of the original 5-year warranty period. Compressors used for replacement may be of like kind and quality and may be new or remanufactured. Defective compressors must be made available to SpacePak in exchange for the replacement compressor and become the property of SpacePak.

3. Notwithstanding the foregoing, if the System is installed in a residential single-family home by a SPACEPAK CERTIFIED CONTRACTOR the parts will be warranted for five (5) years and the compressor will be warranted for ten (10) years, to the original owner, so long as the original owner resides in the home. Specifically, if any parts and/or the compressor should prove defective due to improper workmanship and/or material for the period listed above from the date of installation, SpacePak will replace any defective parts or compressor without charge for the part or compressor. The replacement parts and/or compressor are warranted for the remainder of the original warranty period. Parts and/or compressors used for replacement may be of like kind and quality and may be new or remanufactured. Defective parts and/or compressors must be made available to SpacePak in exchange for the replacement parts and become the property of SpacePak.

4. For purposes of this Solstice Inverter" Series Limited Warranty, as used herein, the term "System" shall mean the Solstice

   Inverter outdoor and indoor components connected via refrigerant piping and electrical wiring purchased on or after

   February 1, 2021, (i) sold from a licensed HVAC representative of SpacePak (and not an unauthorized third party) to the original owner, (ii) installed by such contractor in accordance to local and National regulations in the continental U.S.,

   Alaska, Hawaii, and Canada; and (iii) registered on SpacePak's website located at

   www.SpacePak.com/warranty)

For any Solstice equipment that is non-inverter, please refer to the warranty located in the equipment's original installation manual.

SpacePak Small Duct High-Velocity Air Handlers and Hydronic Fan Coils

Subject to the terms and conditions of this Limited Warranty Statement (the "Limited Warranty"), SpacePak warrants to the original purchaser of the Small Duct High-Velocity Air Handlers and hydronic fan coils that:

1. The parts are warranted for one (1) year to the original owner of the System (as such term is defined in part (3) below). If any parts should prove defective due to improper workmanship and/or material for one (1) year from the date of installation, SpacePak will replace any defective part without charge for that part. Replacement parts are warranted for the remainder of the original 1-year warranty period. Parts used as replacement may be of like kind and quality and may be new or remanufactured. Defective parts must be available for SpacePak in exchange for the replacement parts and become the property of SpacePak.

2. Notwithstanding the foregoing, if the System is installed in a residential single-family home by a SPACEPAK CERTIFIED CONTRACTOR the parts will be warranted for five (5) years, to the original owner, so long as the original owner resides in the home. Specifically, if any parts should prove defective due to improper workmanship and/or material for the period listed above from the date of installation, SpacePak will replace any defective parts or compressor without charge for the part or compressor. The replacement parts are warranted for the remainder of the original warranty period. Parts used for replacement may be of like kind and quality and may be new or remanufactured. Defective parts must be made available to SpacePak in exchange for the

replacement parts and become the property of SpacePak.

3. For purposes of this Small Duct High-Velocity Air Handlers and hydronic fan coils limited warranty, as used herein, the term "System" shall mean the "SpacePak Small Duct High-Velocity Air Handlers, hydronic fan coils purchased on or after February 1, 2021, (i) sold from a licensed HVAC representative of SpacePak (and not an unauthorized third party) to the original owner, (ii) installed by such contractor in accordance to local and National regulations in the continental U.S., Alaska, Hawaii, and Canada; (iii) registered on SpacePak's website located at **www.SpacePak.com/warranty**); and (iv) comprised of SpacePak original components or SpacePak certified components. TO THE EXTENT THAT NON-SPACEPAK OR NON-SPACEPAK CERTIFIED COMPONENTS ARE UTILIZED IN THE SYSTEM, ALL WARRANTIES SHALL NOT BE APPLICABLE.

SpacePak Buffer Tanks
The "Manufacturer" warrants to the original owner at the original installation site that the Hydronic Buffer Tanks (the "Product") will be free from defects in material or workmanship for a period not to exceed ten (10) years from the startup, provided the product is installed under the manufacturer's installation instructions. If upon examination by the Manufacturer the Product is shown to have a defect in material or workmanship during the warranty period, the Manufacturer will repair or replace, at its option, that part of the Product which is shown to be defective.

The following items apply to each Limited Warranty offered by SpacePak

- **NO LABOR.** Each Limited Warranty offered by SpacePak does NOT include labor or any other costs incurred for service, maintenance, repair, removing, replacing, installing, complying with local building and electric codes, shipping or handling, or replacement of the System/Products, compressors or any other parts. For items that are designed to be maintained or replaced by the original owner, the original owner is solely responsible for all labor and other costs of maintaining, installing, replacing, disconnecting or dismantling the System/ Products and parts in connection with owner-required maintenance. Please consult the applicable technical documentation for regularly suggested maintenance procedures.
- **PROPER INSTALLATION**. This Limited Warranty applies only to Systems/Products that are sold by SpacePak HVAC representatives, installed by contractors who are licensed for HVAC installation under applicable local and state law, and who install the Systems/Products per (i) all applicable building codes and permits: (ii) SpacePak's installation and operation instructions: and (iii) good trade practices.
- **BEFORE REQUESTING SERVICE**, please review the applicable technical documentation to ensure proper installation and correct customer control adjustment for the System/Products. If the problem persists, please arrange for warranty service.

TO OBTAIN WARRANTY SERVICE

- Contact the licensed contractor who installed the System/Products or the nearest licensed contractor, dealer, or distributor (whose name and address may be obtained on our website at www.SpacePak.com of any defect within the applicable warranty period.
- Proof of the installation date by a licensed contractor is required when requesting warranty service. Present the sales receipt, building permit or other document which establishes proof and date of installation. In the absence of acceptable proof, this Limited Warranty shall be deemed to begin one hundred twenty (120) days after the date of manufacture stamped on the System/Products.
- This Limited Warranty applies only to System/Products purchased on or after February 1, 2021 while the System/Products remains at the site of the original installation, and only to locations within the continental

United States, Alaska, Hawaii and Canada.

- Shipment, to the Manufacturer, of that part of the Product thought to be defective. Goods can only be returned with prior written approval from the Manufacturer. All returns must be freight prepaid. Determination, in the reasonable opinion of the Manufacturer, that there exists a defect in material or workmanship.

- **THIS LIMITED WARRANTY DOES NOT COVER**: property damages, malfunction or failure of the System/ Products or personal injury caused by or resulting from (a) accident, abuse, negligence or misuse; (b) operating the System/Products in a corrosive or wet environment, including those containing chlorine, fluorine or any other hazardous or harmful chemicals or environmental factors, including sea- or salt-water; (c) installation, alteration, repair or service by anyone other than a licensed contractor or other than according to the manufacturer's instructions; (d) improper matching of System/Products components; (e) improper sizing of the System/Products; (f) improper or deferred maintenance contrary to the manufacturer's instructions; (g) physical abuse to or misuse of the System/Products (including failure to perform any maintenance as described in the Operation manual, or any System/ Products damaged by excessive physical or electrical stress; (h) System/Products that have had a serial number or any part thereof altered, defaced or removed; (i) System/Products used in any manner contrary to the Operation Manual; (j) freight damage; or (k) events of force majeure or damage caused by other external factors such as lightning, power surges, fluctuations in or interruptions of electrical power, rodents, vermin, insects, or other animals- or pest-related issues.

- **THIS LIMITED WARRANTY ALSO EXCLUDES**: (a) SERVICE CALLS WHERE NO DEFECT IN THE SYSTEM/ PRODUCTS COVERED UNDER THIS WARRANTY IS FOUND: (b) System/Product installation or set-ups; (c) Adjustments of user controls; (d) System/Products purchased or installed outside the continental United States, Alaska, Hawaii, and Canada; or (e) System/Products purchased or installed before February 1, 2021. Consult the operating instructions for information regarding user controls.

Documents / Resources

solstice CC32 WIFI Module [pdf] User Manual
HW MXL257 82400137, 82400138, CC32 WIFI Module, CC32, WIFI Module, Module

References

- **SpacePak Central Air | Small Duct High Velocity HVAC**
- **Warranty Registration**
- **SpacePak Rep Locator | SDHV Representatives**
- **User Manual**