



Temperature Controlled Container RAP-AT1 Operation Manual

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Green Tech Better Life

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Revision Record

Edition	Revision No.	Revision Description	Revision Date
A	0	First Release	January 1, 2025
A	1	Revised Section 2.1 Forklift Handling, which specified the requirements for the length of the fork tines during handling in all directions; Revised certain descriptions (e.g., the charging section); Optimized related diagrams;	May 16, 2025

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1. Overview

1.1. Scope of the Manual

- This Manual provides information on the operation of the Temperature Controlled Containers RAP-AT1.
- For any inquiry regarding this manual, contact Qingdao HB TempCon Aviation Co., Ltd. (www.hbtempconaviation.com, aviation@haierbiomedical.com)

1.2. Copyright Notice

- This Operation Manual is authored, published, and distributed by HB TempCon.
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1.3. Disclaimer



The following situations may affect the proper operation of the container, and any resulting property damage or personal injury and fatalities shall be borne by the user:

- Operating the container without complying with this manual;
- Operating the container without required authorization.







1.4. The Container

- The Temperature Controlled Container RAP-AT1, meeting the technical requirements of CTSO-C90e and SAE AS6163TM (2015), is designed for transporting high-value, temperature-sensitive cargo. This container is intended to maintain pre-conditioned cargo within its required temperature range.
- The Temperature Controlled Container RAP-AT1 primarily consists of an insulated compartment, a power control system, and a temperature control system. The insulated compartment is used for holding cargo and the equipment compartment is accommodated with the temperature control system and power control system. The temperature control system encompasses a refrigeration system and a heating system. The power control system includes components such as battery and motherboard.
- The Temperature Controlled Container features data logging capabilities, encompassing data such as inner temperature, battery power, and alarm events. Equipped with a rechargeable battery pack, the container can operate autonomously without an external power source (e.g., on airplanes).

1.5. Safety Instructions

- The Temperature Controlled Container RAP-AT1 meets the minimum requirements and quality control standards of CTSO-C90e. Separate approvals are required for its installation, operation, and use.
- Always follow the safety instructions and rules in this manual as well as all statutory regulations and laws as they may apply, such as IATA Dangerous Goods Regulations, Import and Customs Regulations, and etc.
- Read this Manual prior to using the container. All warnings and safety precautions listed therein must be observed. Furthermore, all information, warning labels and instruction on the containers must be followed.
- The items marked with “  ”in this manual are warning markings.
- The items marked with “  ”in this manual are prohibition markings.
- The design minimizes hazards to personnel and equipment during use. No material used constitutes a risk to the health of the personnel involved. Every attempt has been made to avoid potential dangers and incorporated various protective measures to prevent injury to personnel.
- Use proper protection when operating container door, door locks and the electrical cabinet.
- Take properly protective measures when charging.
- The container is a fork-liftable LD-9 air cargo container designed to accommodate four US-pallets 1220mm×1016 mm (48in×40in) or five EURO-pallets 1200mm×800mm (47.3in×31.5in), or four Chinese-pallets 1200mm × 1000mm (47.24in × 39.37in).

Prohibitions

-  Unauthorized personnel are prohibited to operate the containers.
-  Unauthorized personnel or institutions are prohibited to check or repair the containers.
-  Do not block the air inlets and outlets.
-  Do not use the containers in a smoky environment. Otherwise, the smoke sensor will be triggered and the system will shut down.
-  Do not charge the containers inside the aircraft or charge with any electrical outlets onboard.
-  Do not charge the containers in an outdoor or humid environment so as to avoid short circuits.

1.6. Compartment Structure



Figure 1.6.1 Front View

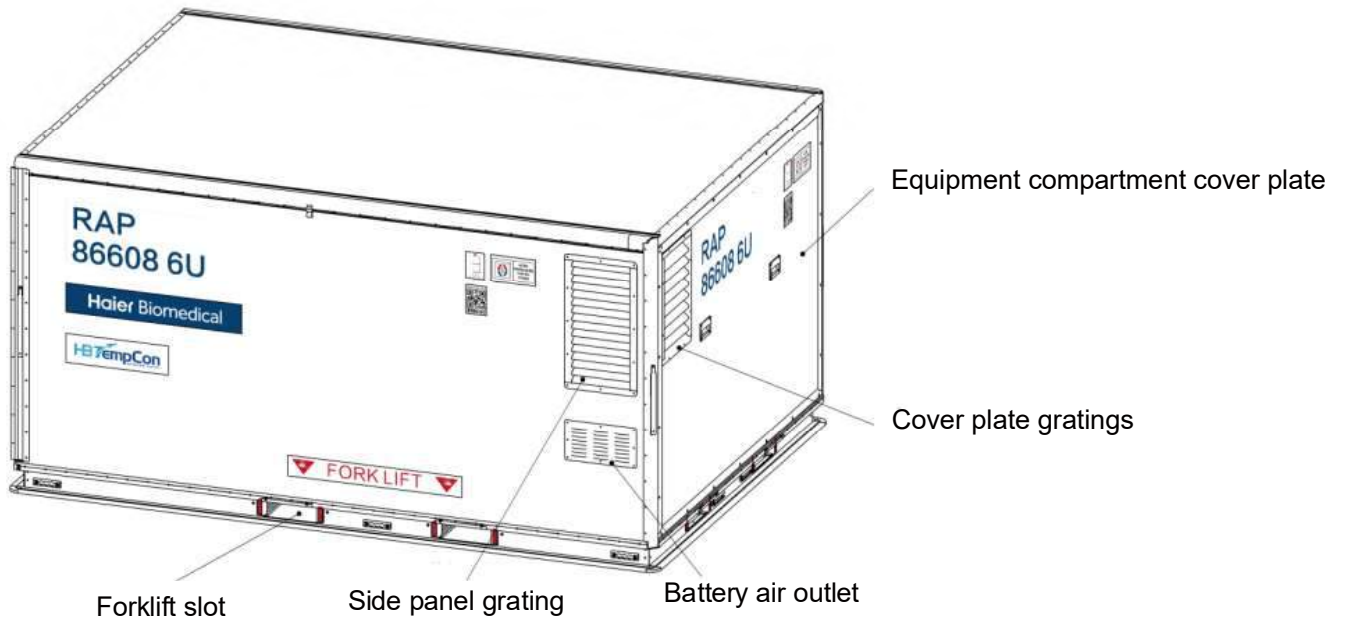


Figure 1.6.2 Rear View

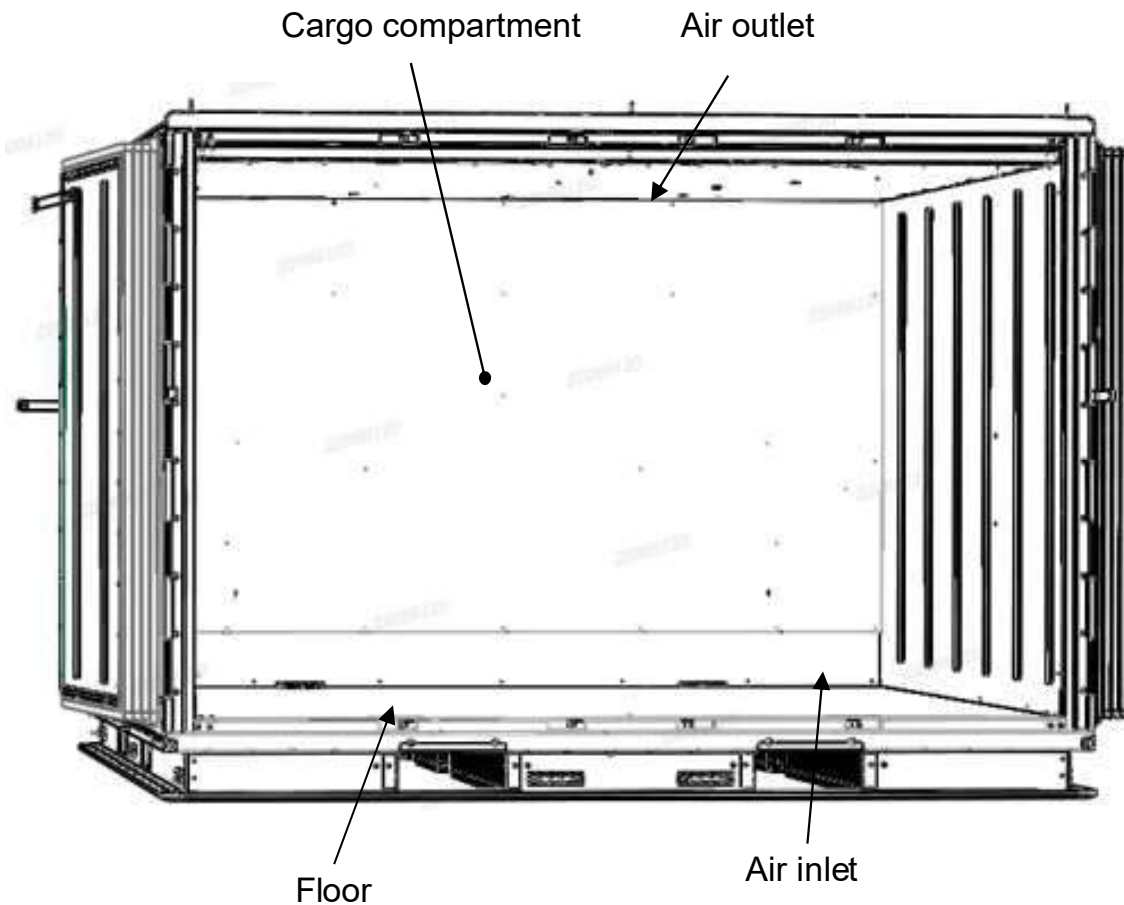


Figure 1.6.3 Door Opening View

1.7. Operational Environment

1.7.1 Storage and Operation Temperature Limit

The containers should be stored in a well ventilated room at ambient temperature (-40 ~ +55) °C / (-40 ~ +131) °F , ambient humidity less than 80%, free of corrosive gases.

The container shall be operating at ambient temperature (-32 ~ +49) °C / (-25.6 ~ +120.2) °F .

1.7.2 Battery Autonomy

The battery autonomy lasts for 50h at set point 5°C /41 °F , ambient temperature 20°C /68 °F with the battery level ≥95%.

- The temperature control system may shut down in a smoky environment.

1.7.3 RAP-AT1 Operation Specification

Temperature Controlled Container RAP-AT1	Specification
Charging power supply	AC(100 ~ 240)V, 50Hz/60Hz
Maximum power consumption	1600W
Maximum charging time	12h
Temperature set point	(3 ~ 30)°C / (37.4 ~ 86) °F , with an adjustment increment of 0.1°C /0.18 °F ; Quick set point 5°C / 20°C (41 °F / 68 °F)
Temperature tolerance: Set point 5°C /41 °F : container temperature is controlled within the set temperature ±2°C /±3.6 °F ; Set point 20°C /68 °F : container temperature is controlled within the set temperature ±2°C /±3.6 °F	
Operating temperature limit:	(-32 ~ +49)°C / (-25.6 ~ +120.2) °F
Recommended charging temperatures	(0 ~ 30)°C / (32 ~ 86) °F
Storage temperature limit	(-40 ~ +55)°C / (-40 ~ +131) °F

1.8. Check Before Use

Prior to the use, check the container for physical damage, ensure the doors open and close properly, confirm charging cables and plugs are intact without defects, verify the cargo hold is clean and free of debris and no alarm messages shown on the TFT screen.

1.9. Dimensions and Parameters

1) Dimensions

Dimensions	External mm(in)	Internal mm(in)
Width	2235.2 ⁰ _{-6.3} (88.00 ⁰ _{-0.25})	2055 (80.91)
Length	3175 ⁰ _{-6.3} (125.00 ⁰ _{-0.25})	2465 (97.05)
Height	1626 ⁰ _{-25.4} (64.02 ⁰ ₋₁)	1315 (51.77)

2) Internal volume: 6.6 m³ (233 Cu.ft)

3) Door opening

Maximum height	1315 mm (51.77in)
Maximum length	2070 mm (81.50in)

4) Base

Base length	3175 ⁰ _{-6.3} mm (125.00 ⁰ _{-0.25} in)
Base width	2235.2 ⁰ _{-6.3} mm (88.00 ⁰ _{-0.25} in)
Minimum width of the slot	255 mm (10.04in)
Minimum height of the slot	91 mm (3.58in)





5)Weight

Gross weight	4625 kg (10196 lb)
Net weight	1140 kg (2513 lb)
Max loading capacity	3485 kg (7683 lb)
Note: The net weight and max loading capacity may vary due to repairs.	

2. Temperature Controlled Container General Operation Instruction

2.1. Forklift Handling

The containers, whether empty or loaded, can only be lifted and moved with a forklift. The forklift's tines must be fully inserted into the slots. The containers must not touch the ground when moved by forklift.

-  It is strictly prohibited to slide the container against the ground with a forklift.
-  When forklifting from the left or right side, the forklift tines must be no shorter than 1.6m (63in).
-  When forklifting from the rear (equipment compartment end), the forklift tines must be no shorter than 1.6m (63in).
-  When forklifting from the front (door end), the forklift tines must be no shorter than 2.2m (86.6in).

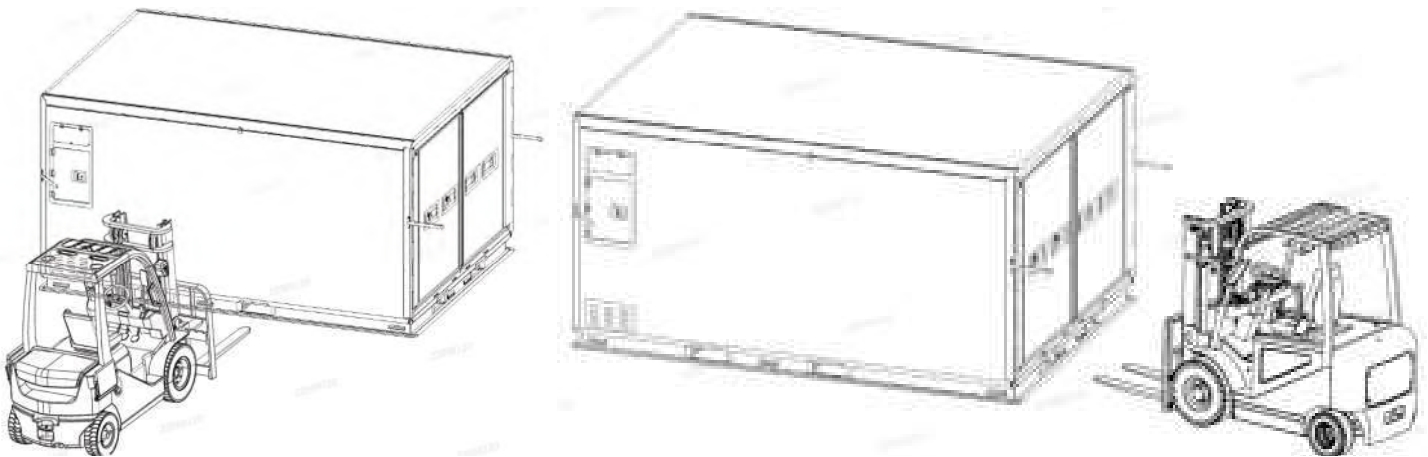


Figure 2.1.1 Forklift Handling

2.2. Roller Bed Handling

Use the straps on the container to handle it on the roller beds.

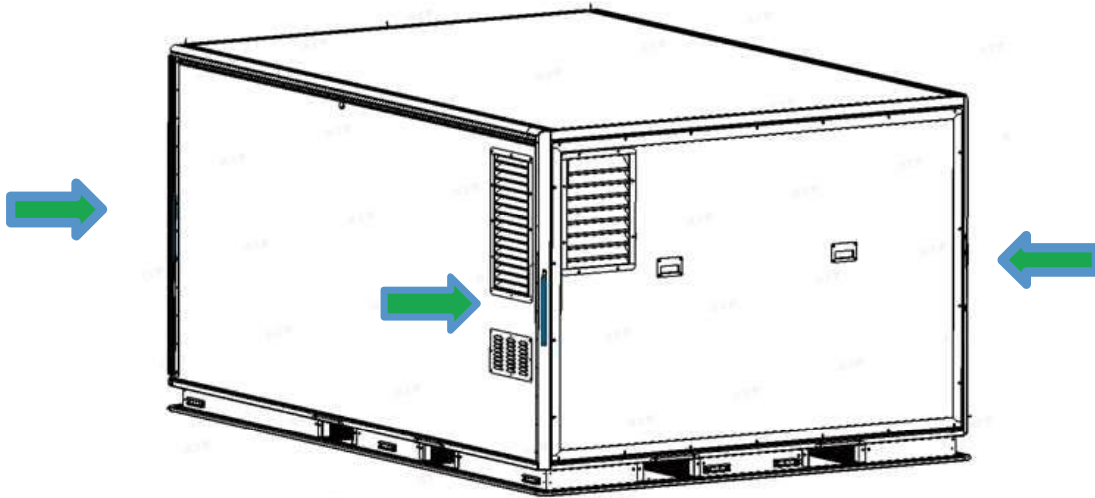


Figure 2.2.1 Strap Location Schematic Diagram

2.3. Ambient Conditions

Make sure the container is operated within the limits specified in Section 1.6.


2.4. Shipment Duration

Charge the container whenever the shipment time exceeds 50h, the container is operating beyond its recommended operating temperature range, or the ambient temperature deviates from the set temperature by more than 20°C /68 °F .


2.5. Wrapping

The container does not require additional package during use. It will fail to work properly if the air inlets or outlets are blocked.

2.6. Ground Transportation Precaution

-  Ensure that the container is transported within the ambient temperature range of (-32 ~ +49)°C / (-25.6 ~ +120.2) °F , and limit the time it is exposed outside the allowable temperature range.

2.7. Air Transportation Precaution

-  To avoid the container exposed to direct sunlight and extreme temperatures, efforts should be made to minimize the time it spends on the tarmac.

2.8. Unloading

Check the container for damage prior to unloading. Keep the temperature control system operate throughout the unloading process.

After unloading, securely close the container door and switch off the container as per Section 2.10.

2.9. Storage

The container storage shall note the following:

1. The containers should be stored in a well-ventilated indoor area, ideally at room temperature, but in any case between (-40 ~ +55)°C / (-40 ~ +131) °F , a relative humidity less than 80%, free of corrosive gases.
2. Charge the battery to at least 95% and then switch off the container. Fully recharge the container at least every 30 days during storage.

-  The container must be powered on to enable battery charging.

2.10. Switch On/ Off

The container is switched on/off as below:

- 1) Open the electrical cabinet door.
- 2) To switch on: Rotate the switch to "START" position and release the knob once the screen lights up.
- 3) To switch off: Rotate the switch to "STOP" position.

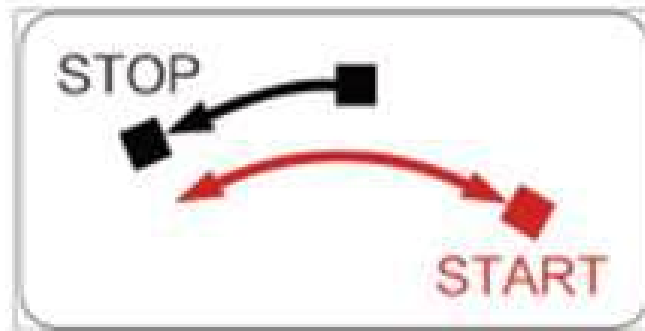


Figure 2.10.1 Switch Knob

2.11. PTI Inspection

After receiving the container, the operation station will perform a PTI inspection to verify its temperature control performance. This operation shall only be performed at the operation station, and the specific instruction is provided in the operation training organized by HB TempCon.


3. Charging


The power required for charging alone is 1000W, while charging with the temperature control system in operation requires 1600W. When using AC power, the supply must provide at least 10A of current with a maximum charging time of 12h. The actual charging time depends on the initial battery level at the start of charging.

The battery is charged while the container is powered on, whether the temperature control system is operating or not. The charging procedure and the charging time will not be affected by an operating temperature control system.


The optimal charging temperature is (0 ~ 30)°C / (32 ~ 86) °F where the charging may fail at the temperature beyond this range.

Pay special attention when moving the container or fully extending the charging power cables. Check whether the cables and plugs are intact before power connection. Avoid using any external supplied cable for charging. The cables shall be fully extended and never coiled or bundled. To avoid overload, a single power outlet is allowed to connect only one container at the same time.

 Do not charge the container inside the aircraft or charge with power supply onboard.

 Do not charge outdoors or in humid environment so as to avoid short circuits.

 Switch on the container before charging.

 If the battery level remains unchanged or exhibits sudden jumps during charging, first check whether the power connection is secure and the charging environment is suitable. If the display screen still does not indicate charging after ruling out these issues, contact HB TempCon operation and maintenance personnel.

3.1. Charging

1) Open the electrical cabinet door.

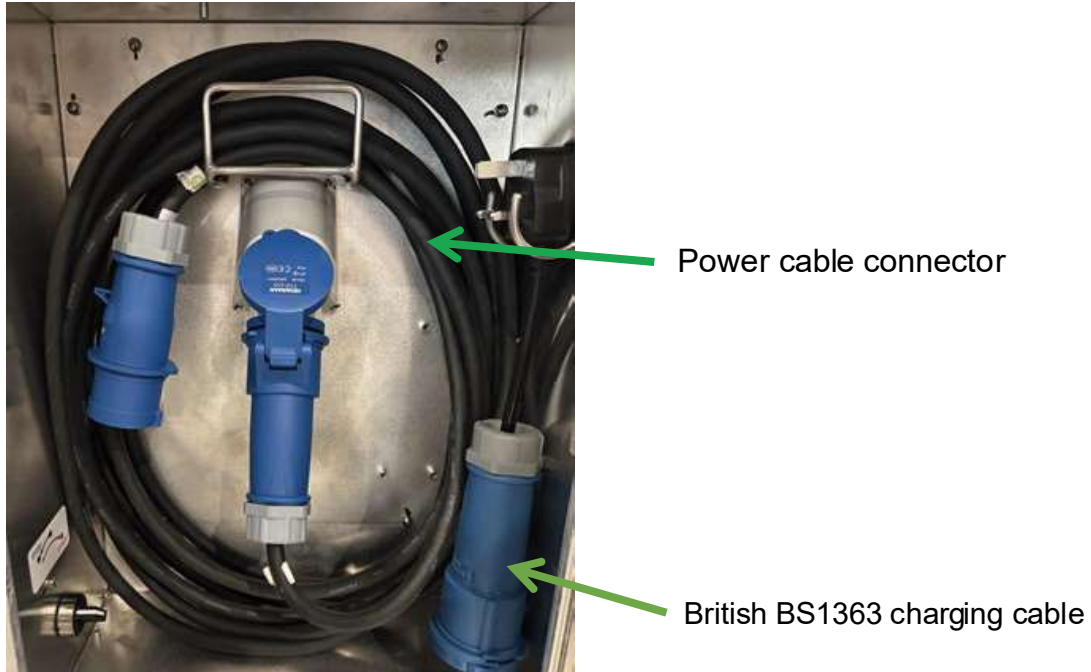


Figure 3.1.1 Electrical Cabinet

2) Switch on the container (see Section 2.10);

3) Fully extend the charging cable. Do not coil or bundle during charging.

4) When using outside Mainland China, the power cable connector needs to be paired with a region-specific charging cable (such as US NEMA 5-15R, Europe AC charging cable, Switzerland AC charging cable, or British BS1363 charging cable).



Figure 3.1.3 Charging Cables

5) When the charging cable is plugged into the power outlet, the battery status bar on the TFT screen will change to the charging status, indicating that the battery is being charged.

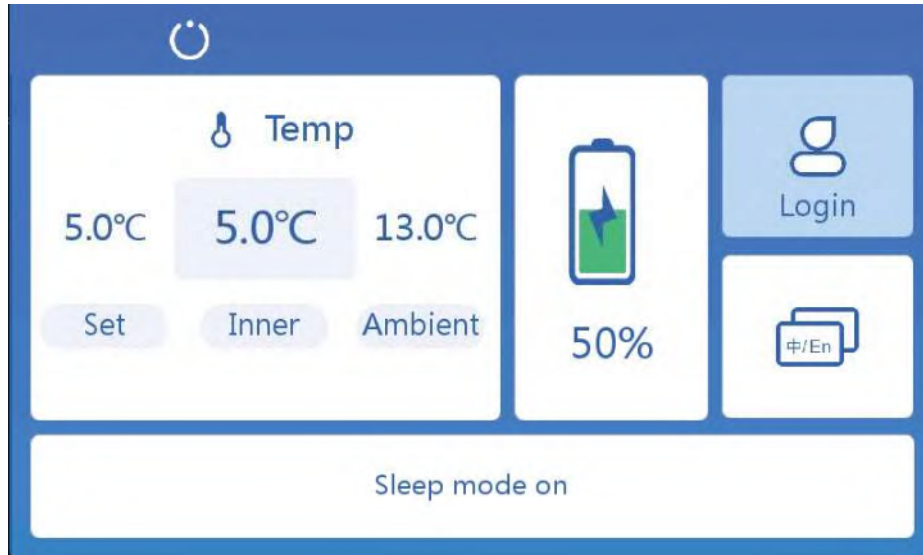


Figure 3.1.4 Battery Charging Status

6) When the battery level displays 100% and AC power icon is shown normally, it indicates that the charging is complete.

7) Unplug the charging cable and place it back into the female hook. Neatly coil the power cable connector and hang it on the cable hook inside the electrical cabinet.

4. Preconditioning

The container and the cargo shall be preconditioned to the required temperature before loading. The temperature control performance of the containers will be affected by incorrect preconditioning.

4.1. Cargo Pre-conditioning

- 1) To avoid the risks of temperature differences, the cargo must be preconditioned and kept at the container set temperature for more than 30 minutes.
- 2) The temperature displayed on the TFT screen shows the container inner air temperature.

4.2. Container Pre-conditioning

There are two ways to precondition the container: pre-conditioning by the container temperature control system and precondition in a temperature controlled room.

4.2.1 Pre-conditioning by the container temperature control system:

The operational steps are as follows:









- 1) Close the left and right doors.
- 2) Switch on the container and connect to AC power.
- 3) Set the temperature and ensure the temperature control system is operating.
- 4) Allow the container to reach and stabilize within the set temperature for at least 30 minutes.

4.2.2 Precondition in a temperature controlled room

The operational steps are as follows:

- 1) Place the container in a temperature controlled room, which is set to the required temperature.
- 2) Open and secure the left and right doors.
- 3) Pre-condition the container for at least 2h before cargo loading. The container shall be switched off during the pre-conditioning. Close the left and right doors afterwards, switch on the container and check the pre-conditioning result.

5. Cargo Loading

-  The cargo must be packed on pallets in a way allowing free airflow in all directions beneath the cargo, between the cargo with the sidewall spacers and between the top air outlets.
-  Make sure the cargo does not block the air inlet and outlet.
-  If the cargo is wrapped with shrink foil, keep the pallet base totally clear from any foil etc. to ensure a free airflow.
-  Load the cargo properly and make sure to distribute the cargo weight evenly on the pallet.
-  Make sure the cargo is secured to the tie-down brackets.
-  Protect the container opening from collision with the pallets or cargo during loading.
-  The cargo must be preconditioned exactly, and the deviation with the set temperature shall not exceed $\pm 1^{\circ}\text{C}$ (1.8°F).
-  The temperature controlled containers shall not be used to store or transport cargo which may possibly damage the containers, including but not limited to unprotected corrosive matters, unsecured materials, or bulk goods that may corrode, oxidize, seriously dent, puncture, contaminate, stain or damage the containers. Additionally, they shall not be used to store or transport any toxic, dangerous, harmful, or filthy matters, including but not limited to all kinds of waste materials and prohibited goods.

5.1. Cargo Loading

- 1) Switch on the container.
- 2) Make sure the container set temperature is correct and pre-conditioned to the required cargo temperature.
- 3) The container user should access whether charging is necessary based on the actual conditions.
- 4) Ensure that the cargo loading personnel is aware of all alarms associated with the container.
- 5) Open and secure the left/right door.
- 6) Load the cargo (Minimize the door opening time, and protect the door opening from damage during cargo loading)
- 7) Secure the cargo to the guide rail for cargo restraint.
- 8) Check if cold/hot air blowing out of the air outlets if the space allows.
- 9) Close the left/right door.
- 10) Confirm that the TFT screen is functioning properly and there are no fault indications on the screen.
- 11) Apply lead seal to the left/right door.
- 12) Place all necessary accompanying documents for transport into the document pouch.

6. Function Introduction

6.1. Start-up Interface

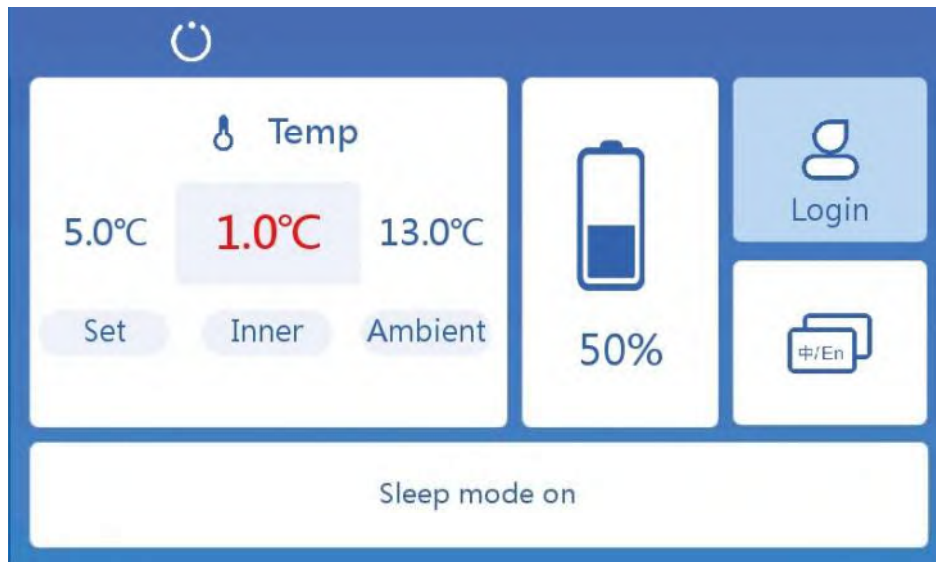


Figure 6.1.1 TFT screen

- 1) Switch on the container, all operating parameters are retained as per the settings prior to shut down. The TFT screen shows the actual inner temperature and battery level.
- 2) The temperature display area indicates the actual container temperature and set temperature with display precision at 0.1°C (0.18°F).
- 3) The battery status area displays the battery level, charging condition and etc.
- 4) Temperature changes occur smoothly without abrupt jumps, gradually transitioning to the actual internal temperature at a rate of 1°C (1.8°F) per 60 seconds. If the abrupt temperature change rate exceeds 1°C (1.8°F)/6 seconds, it accelerates to a rate of 11°C (19.8°F)/60 seconds.
- 5) The temperature display range is (-51 ~ +50)°C / (-59.8 ~ +122) °F .
- 6) After setting the required temperature, the system will adjust to the cooling/heating mode automatically. The temperature on the display screen is measured in Celsius Degree. All settings are logged and will not be lost even during power outages.

6.2. Keys



Figure 6.2.1 Keys introduction

There are 5 keys on the TFT screen.

- 1) " ^ ", " v ", " < ", " > " keys: Short press to move the selection box up, down, left, or right.
- 2) "OK" key: Confirmation function key. Short press to navigate to the function linked with the selection box.
- 3) Long press "<" key for "HOME" function: Long press to return to Homepage (except when already on Home).
- 4) Long press ">" key for "BACK" function: Returns to the previous page. Repeated long presses can navigate back to the homepage.

6.3. Set Temperature

1) Switch on to enter the main interface, press keys to select "Login," enter the correct User Name and Password on the login interface, and press "Save."

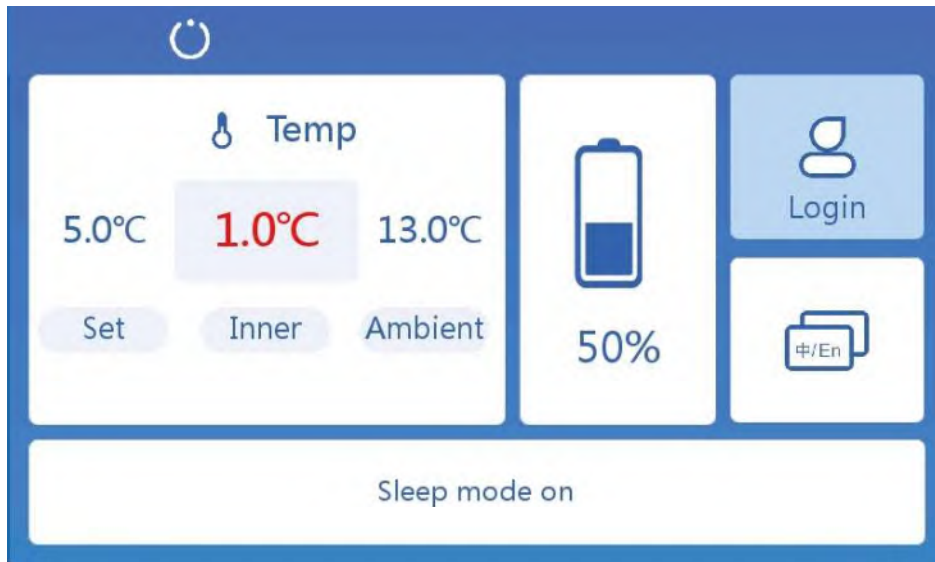


Figure 6.3.1 Main Interface

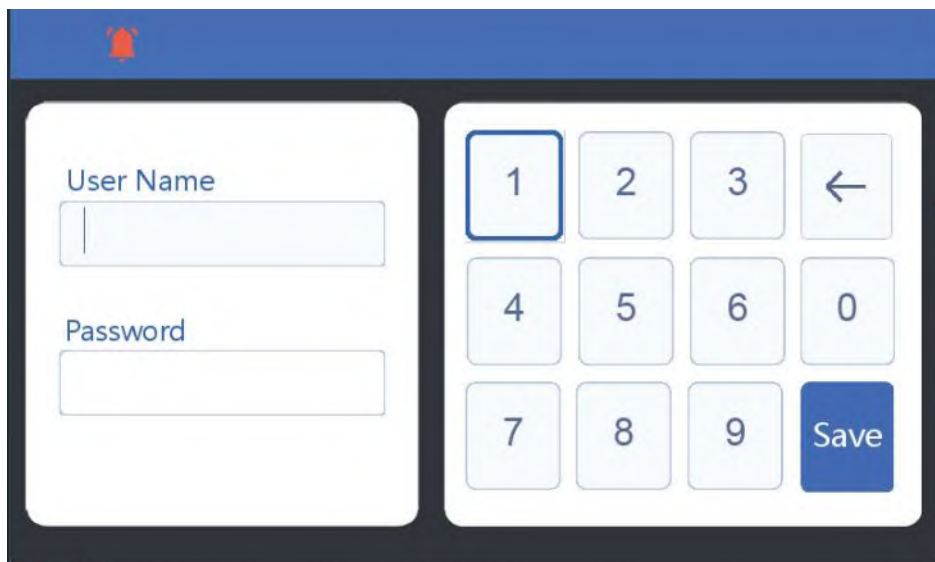


Figure 6.3.2 Login Interface

2) After logging in, enter the menu interface, press to select "Parameter", enter the parameter setting interface to select or set the temperature and confirm.

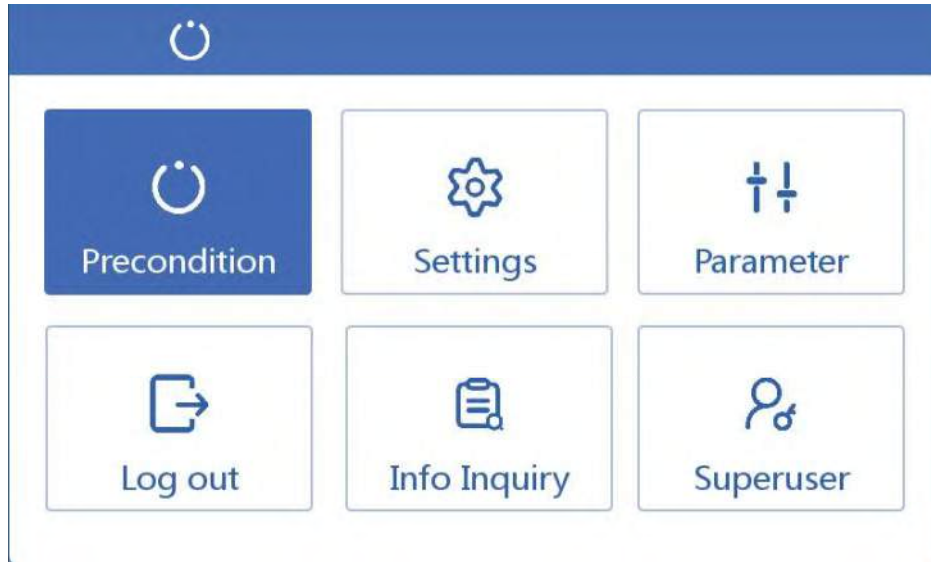


Figure 6.3.3 Main Interface

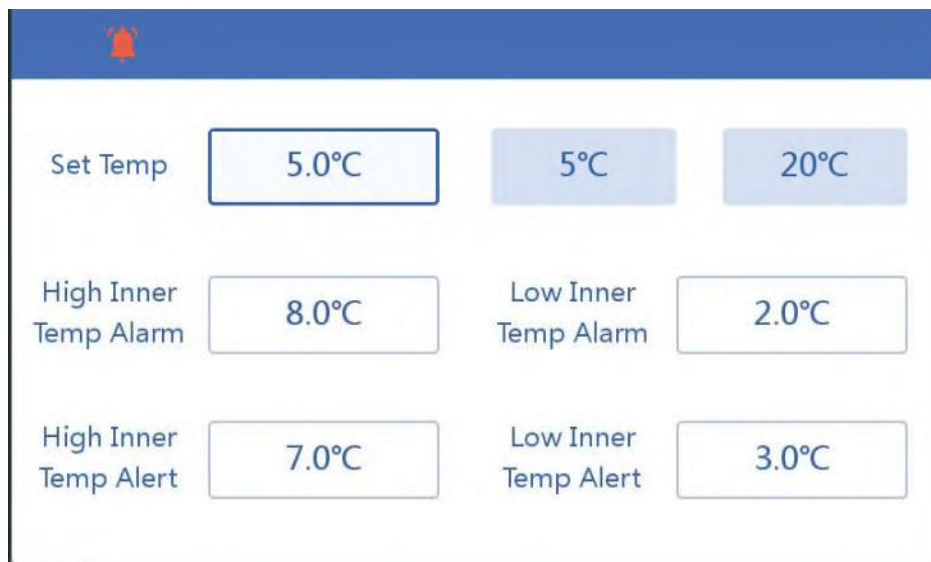


Figure 6.3.4 Parameter Setting Interface

6.4. Temperature Control Operation

- 1) After entering the main interface, set the parameters according to Section 6.3 and then return to the main interface.
- 2) Select "Exit Sleep Mode" on the main interface to start temperature control; at this point, the status bar on the initial interface will display "Temperature control in progress."

6.5. Function Settings

Press and select "Settings" on the main interface to set the temperature unit, door alarm time delay, and preconditioning timer and when necessary, to initiate defrosting, PTI inspection and annual inspection programs. The PTI is conducted before the container is released for use so as to ensure the container compartment and refrigeration system are intact. The annual inspection program aims to verify whether the container's performance meets the requirements to reach the desired temperature within a certain period.



Figure 6.5.1 Settings

6.6. Information Inquiry

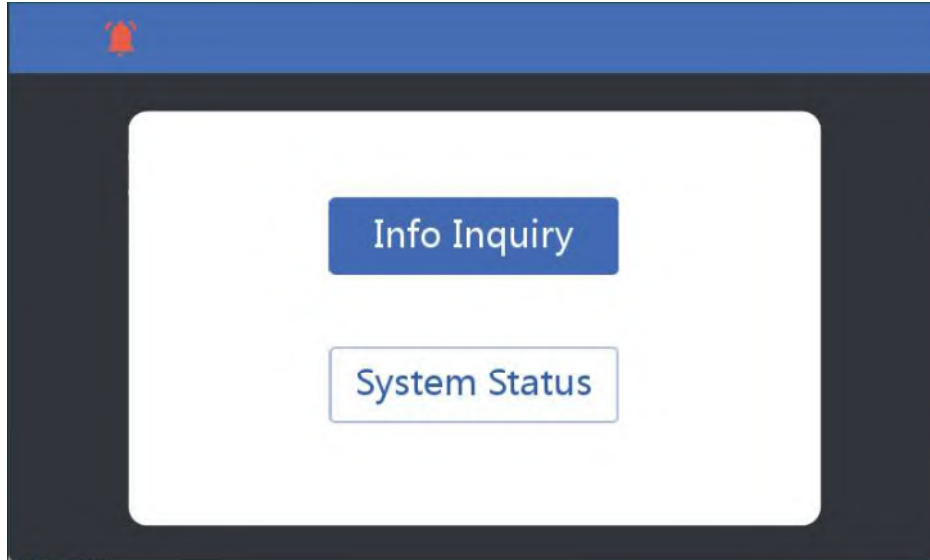


Figure 6.6-1 Information Inquiry Interface



Figure 6.6-2 Basic Information



Figure 6.6.3 Operating Status Information

Note: Green represents normal, red represents faulty, and gray represents not activated.

6.7. Indicator lights and alarm codes

Indicator Light	Status	Definition
Green Light	Constantly on	No action is required, the container is operating normally.
	Flashing	No action required, the container is preparing for operation (charging, quick self-check, quick annual inspection, pre-conditioning, etc.)
Yellow Light	Constantly on	A warning has been triggered, and action is needed to reduce the risk. Specific information is displayed on the screen (ambient temperature out of limit, low battery level warning, etc.). The alarm will be cleared after taking the correct measures.
Red Light	Constantly on	An alarm has been triggered, and immediate action is required. The cargo in the container is at risk of temperature loss. Specific information is displayed on the screen.

Alarm Code Display Method and Recommended Actions:

All alarm indicator light remains active until the alarm is resolved;

When an alarm occurs, the display screen automatically returns to normal brightness and the alarm display area scrolls horizontally in a loop to show all current faults. The display content is "Error Code + Recommended Action".

After 90 seconds of inactivity, the system will return to low brightness mode.

Code	Code Definition	Alarm Mode	Recommended Action	Remark
E0-0	The air inlet ambient temperature sensor is faulty	The yellow light is on	Stop the current journey, replace the container immediately, and perform the replacement in a cold storage facility if conditions permit.	
E0-1	The condenser ambient temperature sensor is faulty	The yellow light is on		
E1-0	Door opening alarm	Yellow light is on after alarm delay time	Close the door	
E2-0	Smoke alarm	The red light is on	Relocate and check the container.	
E3-0	Main temperature sensor is faulty	The yellow light is on	Check the container after the journey.	The red light is on when both sensors are faulty at the same time.
E3-1	Standby temperature sensor is faulty	The yellow light is on	Check the container after the journey.	
E4-0	Battery system is faulty	The red light is on	Contact HB TempCon immediately.	
E4-0	Battery system fault	The yellow light is on	Determine if the remaining journey time exceeds 1.5× the estimated time; replace the container promptly if conditions require.	
E4-1	1# pack fault	The yellow light is on		
E4-2	2# pack fault	The yellow light is on		
E4-3	3# pack fault	The yellow light is on		
E4-4	4# pack fault	The yellow light is on		
E4-5	5# pack fault	The yellow light is on		
E4-6	6# pack fault	The yellow light is on		
E4-7	7# pack fault	The yellow light is on		
E4-8	8# pack fault	The yellow light is on		
E4-9	The battery cannot be charged	The yellow light is on	Determined if the current battery level is sufficient to complete the remaining journey; If not, replace the container immediately	
E5-0	Level 1 low battery warning	The yellow light is on	It is suggested to charge the battery	
E6-0	Level 2 low battery alarm	The red light is on	Charge the battery immediately.	
E7-0	The operational ambient temperature exceeds the limit.	The yellow light is on	Please transfer the container to a suitable environment for use immediately.	

Code	Code Definition	Alarm Mode	Recommended Operation	Remark
E7-1	Battery temperature exceeds the limit.	The yellow light is on	Verify whether the ambient temperature within the container exceeds operational limits	
E8-0	Charging ambient temperature exceeds the limit.	The yellow light is on	Please transfer the container to a suitable environment for battery charge immediately.	
E9-0	High temperature alarm	The red light is on	Stop the current journey, replace the container immediately, and perform the replacement in a cold storage facility if conditions permit.	
E9-1	High temperature warning	The yellow light is on	Confirm that the door is closed and check the ambient temperature.	
E10-0	Low temperature alarm	The red light is on	Stop the current journey, replace the container immediately, and perform the replacement in a cold storage facility if conditions permit.	
E10-1	Low temperature warning	The yellow light is on	Confirm that the door is closed and check the ambient temperature.	
E11-0	Refrigeration system fault	The red light is on	Stop the current journey, replace the container immediately, and perform the replacement in a cold storage facility if conditions permit.	
E11-1	Refrigeration function partial fault	The yellow light is on	Pre-conditioning time will be affected. The container can be used normally. No corrective action required.	
E12-0	Heating tube fault	The red light is on	Stop the current journey, replace the container immediately, and perform the replacement in a cold storage facility if conditions permit.	
E12-1	Heating function partial fault	The yellow light is on	Pre-conditioning time will be affected. The container can be used normally. No corrective action required.	

Code	Code Definition	Alarm Mode	Recommended Operation	Remark
E13-1	Condenser fan fault	The red light is on	Stop the current journey, replace the container immediately, and perform the replacement in a cold storage facility if conditions permit.	
E13-2	Condenser fan partial fault	The yellow light is on	Pre-conditioning time will be affected. The container can be used normally. No corrective action required.	
E14-0	Evaporator fan fault	The red light is on	Stop the current journey, replace the container immediately, and perform the replacement in a cold storage facility if conditions permit.	

6.8. Parameter setting value

Definition	Code	Default Value		Setting Range	Adjustment Step	Remarks
Set temperature	L0	Celsius (°C)	5°C	(3~30)°C (Quick setup 5°C /20°C)	0.1°C	When reset the temperature, the high/low temperature pre-alarm values will automatically revert to default values.
		Fahrenheit (°F)	41°F	(37.4~86)°F (Quick setup 41°F /68°F)	0.1°F	
High temperature warning	L1	Celsius (°C)	L0+2°C (L0≤10°C); L0+4°C (L0>10°C);	[L0+1°C ; 49°C] and [L2-1°C ; 49°C]	0.1°C	Synchronize the high-temperature alarm threshold adjustment -round up Fahrenheit values to the nearest multiple of 1.8°F
		Fahrenheit (°F)	L0+3.6°F (L0≤50°F); L0+7.2°F (L0>50°F);	[L0+1.8°F ; 120.2°F] and [L2-1.8°F ; 120.2°F]	1.8°F	
High temperature alarm	L2	Celsius (°C)	L0+3°C (L0≤10°C); L0+5°C (L0>10°C);	[L1+1°C ; 50°C]	0.1°C	Synchronize the high-temperature alarm threshold adjustment - round up Fahrenheit values to the nearest multiple of 1.8°F
		Fahrenheit (°F)	L0+5.4°F (L0≤50°F); L0+9°F (L0>50°F);	[L1+1.8°F ; 122°F]	1.8°F	

Definition	Code	Default Value		Setting Range	Adjustment Step	Remarks
Low temperature warning	L3	Celsius (°C)	L0-2°C (L0≤10°C); L0-4°C (L0>10°C);	[-20; L0-1] and [-20; L4+1]	0.1°C	Synchronize low temperature alarm threshold
		Fahrenheit (°F)	L0-3.6 °F (L0≤50 °F); L0-7.2 °F (L0>50 °F);	[-4 °F ; L0-1.8 °F] and [-4 °F ; L4+1.8 °F]	1.8 °F	
Low temperature alarm	L4	Celsius (°C)	L0-3°C (L0≤10°C); L0-5°C (L0>10°C);	[-20°C ; L3- 1°C]	0.1°C	Synchronize low temperature alarm threshold
		Fahrenheit (°F)	L0-5.4 °F (L0≤50 °F); L0-9 °F (L0>50 °F);	[-4 °F ; L3- 1.8 °F]	1.8 °F	
Door Open Alarm Delay Time	L6	0min		(0-30) min	1min	Door open/close only
Heating Activation Offset	L7-1	/	[-0.4;0.4]	0.1°C	/	
Heating Deactivation Offset	L7-2	/	[-0.4;0.4]	0.1°C	/	
Cooling Activation Offset	L7-3	/	[-0.4;0.4]	0.1°C	/	
Cooling Deactivation Offset	L7-4	/	[-0.4;0.4]	0.1°C	/	
Sensor Offset Calibration Value	/	/	-5°C ~5°C	0.1°C	/	
When resetting temperature, the high and low temperature alarm and warning values will change accordingly.						

6.9. Exporting data records to USB flash disk

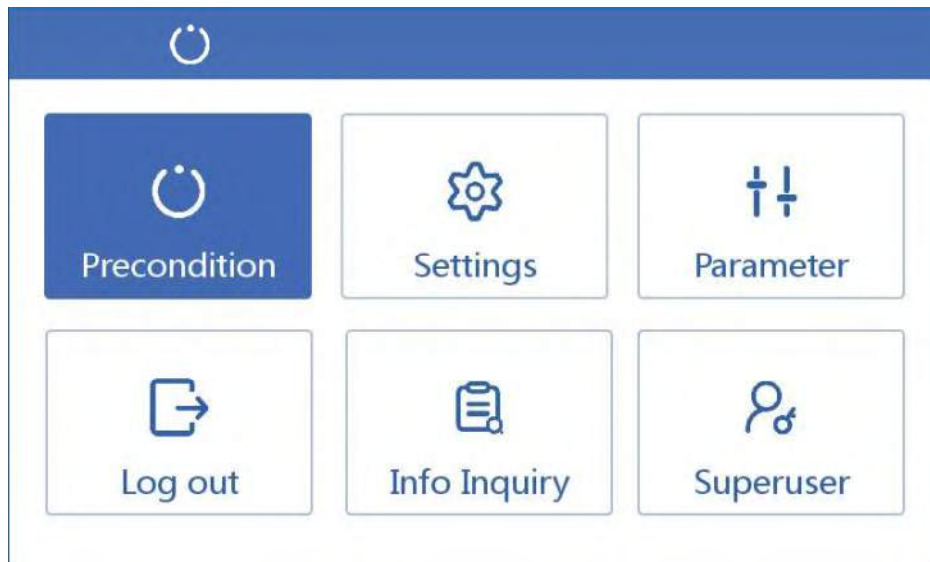


Figure 6.9-1 Menu interface

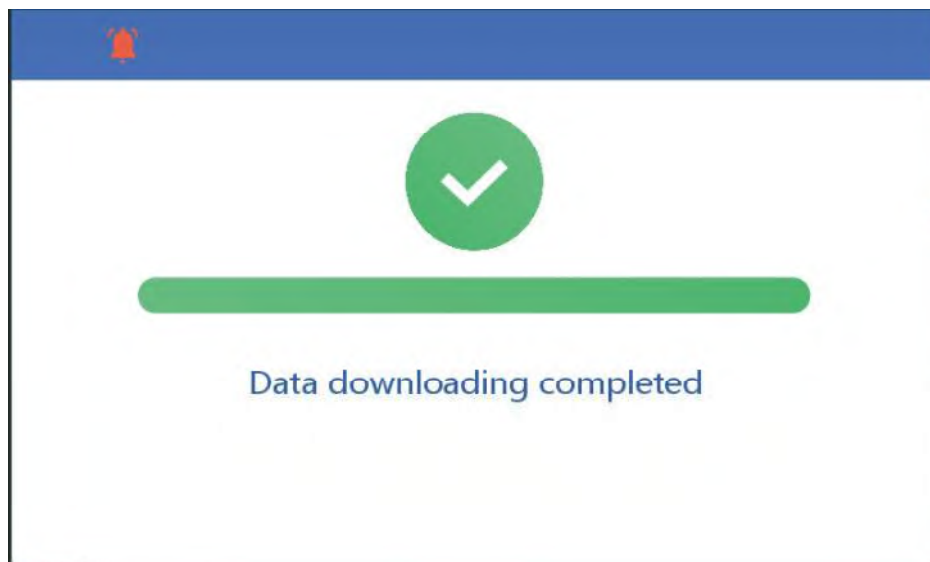


Figure 6.9-2 Data export completed

The container data, BMS data, and events can be exported through the USB module. It includes data and events such as the left/right door opening, temperature setting records, time setting records, smoke alarms, low battery, and corresponding time information.

The data is exported as follows:

- 1) Switch on the container, insert the USB flash drive into the USB port inside the electrical cabinet;
- 2) Log in and enter the menu interface;
- 3) Select data download;
- 4) Wait for the progress bar to reach 100% to indicate that the data downloading is complete;
- 5) Pull out the flash disk.



The format of USB flash disk should be FAT32 (right click-attribute-general-file system to check). It is recommended to use a USB flash drive with a capacity of less than 64GB.