



**Powerology**

# **Portable Fridge 55L with APP**

SKU: PPFA55LBK



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Before installing and using the product, please carefully read this User Manual to guarantee correct usage and keep it secure for future reference.

## Features

- 1.** Equipped with a USB Type-C charging interface and Bluetooth application connectivity.
- 2.** Integrates a Lithium battery with a capacity of 20.8Ah.
- 3.** Includes a solar charging port equipped with a 50A Anderson connector.
- 4.** Features a highly efficient and energy-saving DC compressor and conversion module, ensuring high reliability, and longevity, and providing rapid cooling, cold storage, and deep cooling capabilities.
- 5.** Utilizes a high-density polyurethane insulation layer, offering excellent insulation properties and low energy consumption.
- 6.** Versatile usage for both automotive and domestic settings, compatible with 12V/24V power sources.
- 7.** Capable of rapid cooling to  $-22^{\circ}\text{C}$  (based on a test ambient temperature of  $32^{\circ}\text{C}$ ).
- 8.** Includes an intelligent control system with a power-off memory function to retain settings.
- 9.** Equipped with an auto battery intelligent protection system to safeguard your vehicle's battery.
- 10.** Offers adjustable temperature control, ranging from  $-22^{\circ}\text{C}$  to  $+24^{\circ}\text{C}$ , ensuring a wide spectrum of electronic temperature regulation.
- 11.** Boasts a unique design aesthetic, combining fashion and functionality.
- 12.** The cover is designed to be opened from either side for convenience.
- 13.** Comes with an integrated beer opener and a lid featuring a cola drink holder.

## Charging Guideline

1. DC power via the DC power cable.
2. Regulated solar connection via the Anderson connector.
3. It can be charged while the refrigerator is turned off.
4. The battery pack needs to be activated during the charging process.
5. For solar charging, the solar controller must be configured to the Lithium-ion battery setting.

### Note:

1. If storing the fridge for an extended period, please turn off the battery pack on the battery.
2. The Anderson plug and DC5521 socket should only be assembled on the device in conjunction with the Lithium battery.

## App Connectivity

To initiate a Bluetooth connection follow these steps:

1. Download and install the “**SmartLife**” app by scanning the QR code or searching the app name in the App Store or Google Play.
2. Connect the fridge using the DC or AC power cord, and switch on the fridge.
3. Activate Bluetooth on your phone.
4. Launch the app, “Agree” to the “User Agreement/Privacy Statement”, and proceed to register for the app.
5. After registration, the screen will display “Discovering devices”. Select “Add” to pair the fridge. Subsequently, the device icon will appear in the app interface.



(Android / iOS)

6. Begin utilizing the Bluetooth app with your fridge to access its features through the app.

**Note:** Please note that when not using Bluetooth, ensure to delete the connected device in the app so it can be discoverable and connectable by other devices

## App Interface

1. To modify the settings, click the lock icon to unlock it; the system will automatically re-lock after 30 seconds of inactivity.
2. Check/change the temperature setting or the temperature unit preference.
3. Verify or modify the voltage monitor settings.
4. Check or alter the compressor speed settings.
5. Power the fridge on or off.
6. Paired icon - ensure you are within the Bluetooth connectivity range of the fridge to stay connected.



## Usage Guide

1. Ensure to connect the appropriate power supply cable is prior to use.
  - 1.1 Utilize a 12V/24V DC power cord to connect the device to the car charger.



2. Adjust the display and panel diagram by using a USB Type-C cable and Bluetooth app connectivity.



**2.1** Long press button  to switch the device on/off.

**2.2** Long press button  for 2 seconds to unlock the device. The screen will light on and the icon  will disappear from the screen.

**2.3** Adjust the operating temperature.

Single Zone: Use  and  to set the required temperature on the display.

**Note:** The temperature setting range for the refrigerator is from  $-22^{\circ}\text{C}$  to  $+24^{\circ}\text{C}$ . When the internal temperature reaches the set point, the compressor will cease operation.

**2.4** MAX/ECO Mode: To diminish energy usage, engage ECO mode. To switch to MAX/ECO, press the button  once and then use  to set the temperature while the MAX/ECO icon is flashing.

**Note:** This mode will decrease power consumption but will also extend the time needed to reach the desired temperature.

**2.5** Temperature Unit  $^{\circ}\text{C}/^{\circ}\text{F}$ : To toggle between Celsius and Fahrenheit, press the button  3 times and then use the temperature adjust button  to change  $^{\circ}\text{C}/^{\circ}\text{F}$  when the icon is blinking.

**2.6** Voltage Monitor Setting: There are three stages to safeguard the power supply's voltage: High, Medium, and Low. To alter the voltage protection stage, press the  button twice and then use the  or  button to adjust the temperature and select H/M/L while the indicator blinks.

**A.** For an in-car battery, the Medium (M) stage is the default setting.

**B.** For an external battery or backup, select the Low (L) stage.

The Parameters for 3 voltage settings of H/M/L are as follows:

Voltage stage	12V	12V	24V	24V
Action	Stop	Start	Stop	Start
L	9.6	11.2	21.4	23.0
M	10.4	11.7	22.8	24.2
H	11.1	12.4	24.3	25.7

### C. Error Guidelines

Error code	Possible Cause	Solution
E1	Low voltage input to the fridge	<p><b>For DC issues:</b></p> <ol style="list-style-type: none"> <li>1. Increase the voltage of the DC power source.</li> <li>2. Ensure all connections are secure.</li> <li>3. Check the voltage monitor settings.</li> </ol> <p><b>For AC issues:</b></p> <p>Replace any faulty 240V AC adapters.</p>
E2	Condenser fan fault	The fan should be repaired by professionals.
E3	Compressor overpressure	Disconnect the fridge for 20 minutes, then attempt a restart.
E4	Compressor minimum speed fault	The compressor should be repaired by professionals.
E5	Over temperature for compressor and control unit	Disconnect the fridge for 20 minutes, then attempt a restart.
E6	NTC/ temperature sensor failure	The sensor should be repaired by professionals.

**Caution:** Vehicle output voltages vary. If error E1 is displayed, reduce the voltage stage by one level, for instance, from High to Medium, or Medium to Low.



# Specifications

Model	PPFA55LBK
Product Volume	55L
Voltage	12V/24V
Power	60W
Electrical Current	5.0A (12V) / 2.5A (24V)
Lithium Battery	20.8Ah / 12.7V (Max.)
Dimensions (L×W×H)	525×533×862 mm
Cooling Temperature Range	-22°C to +24°C
Environment Type	T / ST / N / SN
Electrical safety grade	III
Refrigerant	R134A Freon
Foaming Agent	C5H10 / C-Pentane
Features	<ol style="list-style-type: none"> <li>1. Digital temperature display and control temperature panel</li> <li>2. "Crown Lid" bottle opener</li> <li>3. Bottom drain hole</li> <li>4. LED lights</li> <li>5. Removable wire basket</li> <li>6. Bluetooth App + USB + Type-C charging port</li> <li>7. Reversible door</li> </ol>

# Troubleshooting

## **1. The refrigerator does not work.**

**1.1** Verify the power source to ensure the voltage is neither too high nor too low.

**1.2** Inspect all power cables and connections between the power source and the refrigerator.

**1.3** Check whether both the power source and the refrigerator are switched on.

**1.4** Confirm whether the battery is securely installed (applicable when using a lithium battery).

## **2. Poor Refrigeration Performance.**

**2.1** Verify that the lids are securely closed.

**2.2** Ensure that the power source is delivering adequate voltage.

**2.3** Improve ventilation around the fridge to prevent overheating.

**2.4** Avoid overfilling the fridge with food.

**2.5** Check that the food placed inside the fridge is not too warm.

**2.6** Adjust the temperature setting if it is set incorrectly.

**2.7** Consider that high ambient temperatures can affect cooling efficiency.

# Tips and Maintenance

## **Tips**

**1.** Store fresh and frozen foods separately within the cabinet to prevent the fresh food from freezing and/or spoiling.

**2.** Avoid storing glass bottles or liquids like milk, juices, or soft drinks at 0°C or lower temperatures, as they may freeze, and potentially the container might shatter, leak, or crack.

**3.** Place fruits and vegetables closer to the top of the cabinet, where they tend to be slightly warmer, to minimize the risk of spoilage and the fruits being crushed as a result of heavier items.

**4.** Frequent door opening increases the amount of warm air entering the cabinet. Opening the device's door less often helps maintain a consistent temperature inside the fridge.

**5.** When positioning the appliance in the rear of a car or trailer, ensure it is out of direct sunlight and has proper ventilation to avoid overheating and to ensure efficient power consumption and performance. Remember, the interior of a vehicle parked in the sun can become significantly hotter than the ambient temperature. For instance, when the ambient temperature is 33°C, the temperature inside the vehicle can reach up to 55°C.

**6.** The suggested temperature settings for storing common items are as follows:

Product	Temperature
Water	5°C
Fresh Juice	2°C – 10°C
Milk	2°C – 6°C
Red wine	13°C
Vaccine, Insulin	2°C – 8°C
Fruits	2°C – 8°C
Beverages	2°C – 5°C
Vegetables	2°C – 13°C
Cooked Food	4°C

Meat	-18°C — -10°C
Ice cream	-15°C
Seafood	-3°C
Frozen Food	-18°C

## Maintenance

1. Your fridge will arrive clean from the factory, but it is recommended that you clean it before the first use.
2. Employ a cloth dampened with warm water for cleaning.
3. Pay attention not to allow water to drip onto the seals or electronics to avoid damage.
4. After cleaning, thoroughly dry the fridge with a cloth.
5. Regularly clean your fridge, especially when it appears dirty.

## Attention

1. Refrain from using cleaning solvents or substances that contain abrasive or acidic components to clean your fridge.
2. Avoid the use of brushes, graters, or any hard and sharp instruments for cleaning your fridge.
3. Ensure that the power cable is unplugged and the fridge is turned off before cleaning.
4. Wipe the interior and exterior of the fridge with a damp cloth. For any persistent dirt, a solution of sodium bicarbonate in lukewarm water can be used.
5. After cleaning, rinse with clean water and dry meticulously.
6. If you need to store your fridge for an extended time, leave the lid slightly open to prevent mold growth and the accumulation of odors.

## **Warranty**

Products that you buy directly from our **Powerology** website or shop come with a 24-month warranty.

The 24-month warranty applies to products purchased directly from our **Powerology** website or store. If **Powerology** products are bought from any of our verified retailers, then the product is eligible for only a 12-month warranty. To extend your product's warranty, visit our website **powerology.me/warranty** and fill in your details in the provided form along with an uploaded picture of the product to process your request. Once approved, you will receive a confirmation email of the extended product warranty. Upload the required information within 48 hours of purchase to be eligible for a 24-month warranty period.

For more info, please check:  
**powerology.me/warranty**

## **Contact Us**

If you have any questions about this Privacy Policy, please contact us at: **hey@powerology.me**

Website: **powerology.me**

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