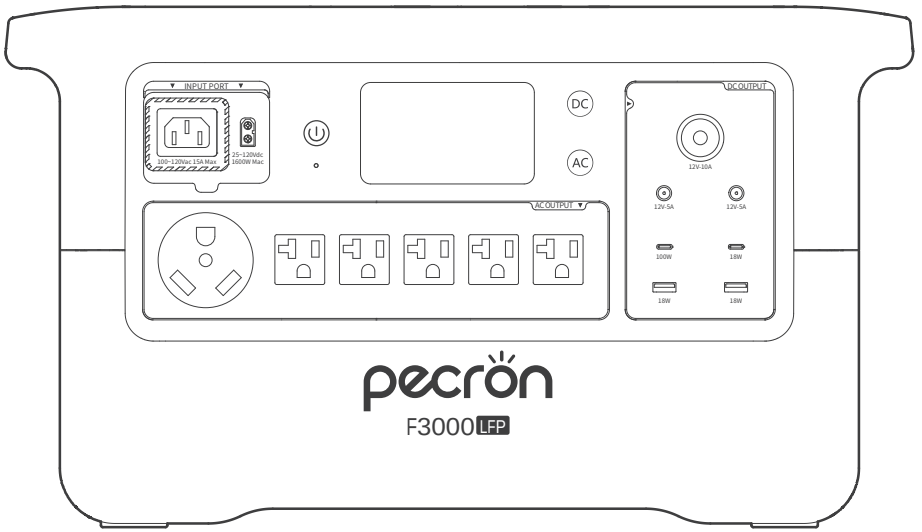
USER MANUAL

F3000 LFP



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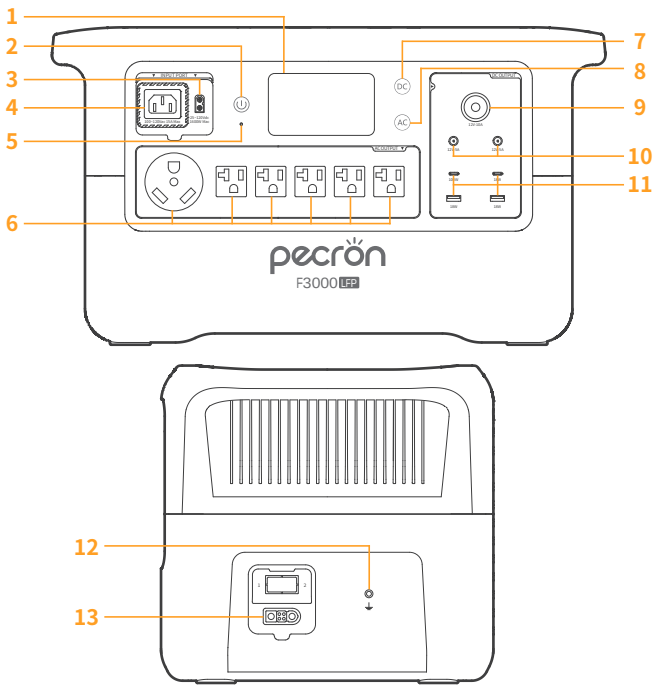
DESCRIPTION OF SYMBOLS

⚠ Important Notes

Tips for operation and use

FUNCTION INTRODUCTION



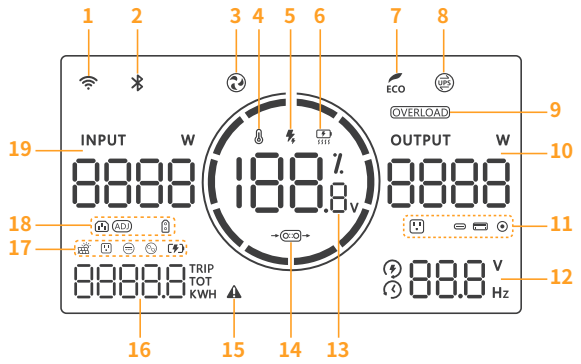
Product appearance and structure may vary by country/region; refer to the physical product.

1 LCD Display
2 Main Switch
3 DC 25V~120V Charging Port
4 AC 100V~120V Charging Port
5 Breathing Light
6 AC 100V~120V Output
7 DC 12V / USB Switch
8 AC 100V~120V Switch
9 DC Auxiliary Output
10 DC 5525 Output
11 USB-A / USB-C Ports
12 External Grounding Port
13 Battery Expansion Port

SPECIFICATIONS

GENERAL INFO	
Model	F3000 LFP
Capacity	3072Wh(51.2V60Ah)
Net Weight	Around 28.7kg / Around 63.3lb
Dimension	L489*W295*H282 mm / L19.3*W11.6*H11.1 in
Maximum Operating Altitude	3000m
OUTPUT SPECIFICATION	
AC Output *6	Pure sine wave 100~120Vac-30A Max 100V - 3000W Max 110V - 3300W Max 120V - 3600W Max
USB-A *2	(5V,9V,12V,18W Max)*2
USB-C *2	(5V,9V,12V,18W Max)*1 (5V,9V,12V,20V,100W Max)*1
Cigar Port *1	DC 12V-10A
DC 5525 Output *2	DC 12V-5A
INPUT SPECIFICATION	
AC INLET *1	100Vac, 50/60Hz, 1500W Max, 15A Max 110Vac, 50/60Hz, 1650W Max, 15A Max 120Vac, 50/60Hz, 1800W Max, 15A Max
XT60 *1	25Vdc~120Vdc, 1600W Max, 25A Max
EXTRA BATTERY PORT	
XT120 *1	Cascade up to 2 battery packs
BATTERY SPECIFICATIONS	
Cell Materials	LFP (LiFePO4)
Cycle Life	Maintains over 80% capacity after 3500 cycles
OPERATING TEMPERATURE	
Supply Ambient Temperature	-20°C ~ 45°C / -4°F ~ 113°F
Charging Ambient Temperature	0°C ~ 45°C / 32°F ~ 113°F
Storage Ambient Temperature	-20°C ~ 45°C / -4°F ~ 113°F (Optimal Range: 20°C ~ 30°C / 68°F ~ 86°F)

DETAILS AND OPERATING INSTRUCTIONS OF THE DISPLAY



1		WIFI Connection	13		Battery Percentage Display
2		Bluetooth Connection	14		Input/Cascade Port Access /Output
3		Fan Working	15		Alarm Symbol
4		Temperature Alarm	16	TRIP	Single Accumulated Power
5		Fast Charge		TOT	Total Accumulated Power
6		Battery heating has been turned on		KWH	Power Usage
7	ECO	ECO Mode	17		Solar Input (Total)
8	UPS	UPS Function			AC Input (Total)
9	OVERLOAD	Overload Alarm			DC Output (Total)
10	OUTPUT W	AC/DC Output			AC Output (Total)
11		AC Output Port			Battery Output (Total)
		USB-C Output Port	18		AC Input
		USB-A Output Port		ADJ	AC Power Adjusted
		5521 Output Port			DC Input
12		Remaining Charging Time	19	INPUT W	AC/DC Input
		Remaining Usage Time			
	V HZ	AC Output Voltage/Time /Frequency			

Blinking: The product has been reset and is in pairing mode.

OVERLOAD Blinking: Overload protection triggered. Please disconnect some devices to reduce total power output. The alarm will automatically reset once power output returns to normal.

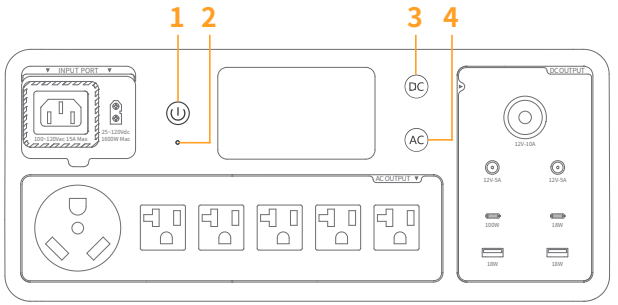
OPERATING INSTRUCTIONS

1: Main On/Off Button: Short press for 0.5s / long press to turn on, short press to turn off the screen when it power-on.

2: Breathing Light:
White Flashing: Device in operation or standby mode.
Solid Green: Device fully charged.

DC **3: DC Button:** Short press toggles the percentage voltage display when the power-on. Long press turns power on/off(beep).

AC **4: AC Button:** Short press toggles the percentage voltage display when the power-on. Long press turns power on/off(beep). / Same function as DC Button.



+ DC ECO MODE: Press & hold power + DC button for 3s to enter ECO mode when it power-on.

Device Reset Into Pairing Mode: long press the on/off key for 5 seconds under power-off state, power on to reset the machine and join pairing mode (3 minutes). At this time the Bluetooth/WIFI icon is blinking.

DC Access User Settings Interface: In the shutdown state, press and hold the DC key for 8 seconds to enter the user settings interface.

USER SETTINGS INTERFACE

(DC) **Enter user settings interface:** While powered off, press and hold the DC button for 8s to enter.

(⏻) Press the power-off button to exit, or navigate to the last page to end and exit.

Short press DC button to switch setting, short press AC button to enter the next setting.

1: AC Charging Power Setting:
Rated power 20%~100%
(Factory default 100%).

2: Auto-Shutdown Timer Without AC Output:
OFF/1H/2H/3H/4H
(Factory default OFF).

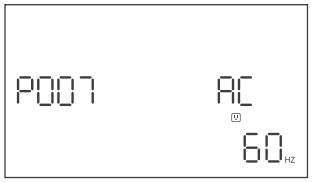
3: Button Brightness: OFF/L1/L2/L3
(Factory default L3)

4: Buzzer Sound: ON/OFF
(Factory default ON)

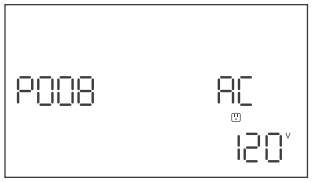
5: Anti-Touch Mode
(Factory default ON)

6: Auto-Dim LCD Screen Brightness:
ON/OFF
(Factory default ON)

7: AC Output Frequency: 50Hz/60Hz



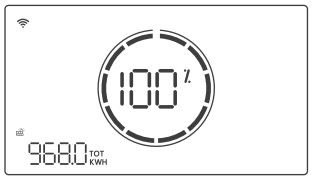
8: AC Output Voltage:
100V/110V/120V (LV Version)
220V/230V/240V (HV Version)



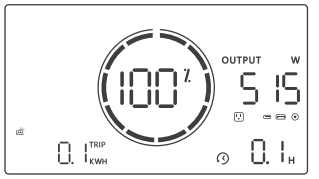
9: Parallel Mode Setting: ON/OFF
(Factory default OFF)
(LV version do not support)

USING THE STATISTICS INTERFACE

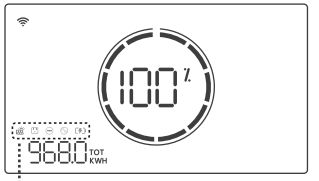
Standby: TOT = Total Power



Operation: TRIP = Session Power/Since Startup



Standby: Short Press [DC] to
display the input&output data.



Solar Input (Total)

AC Input (Total)

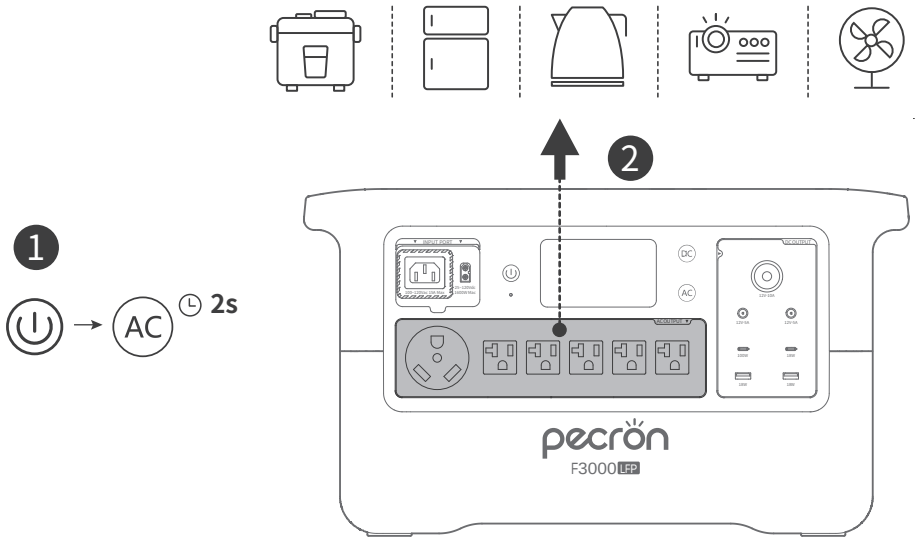
DC Output (Total)

AC Output (Total)

Battery Output (Total)

Short Press [DC] to switch modes.

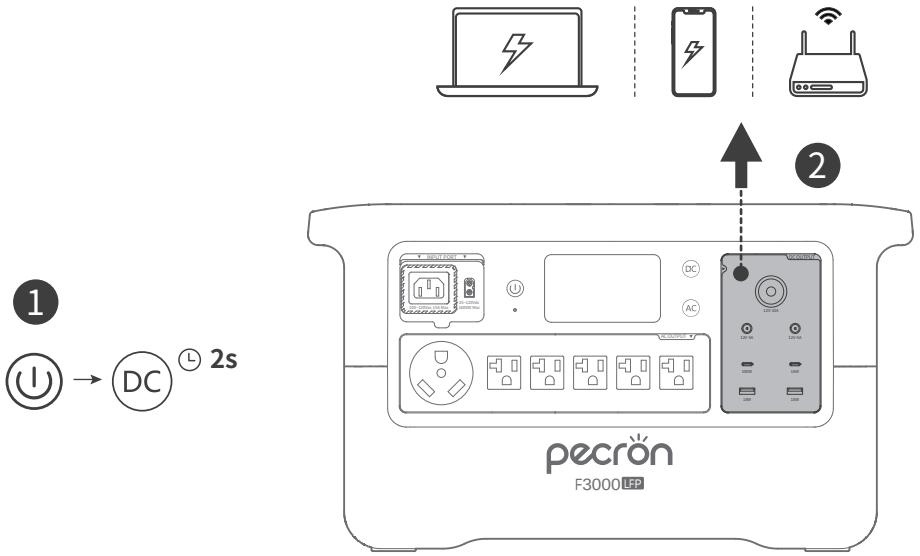
AC OUTPUT TO POWER THE DEVICE



1: In the power-on state, press and hold the AC button to
turn on the power output of the corresponding interface area.
2: Connect the device to the AC output socket of the product.

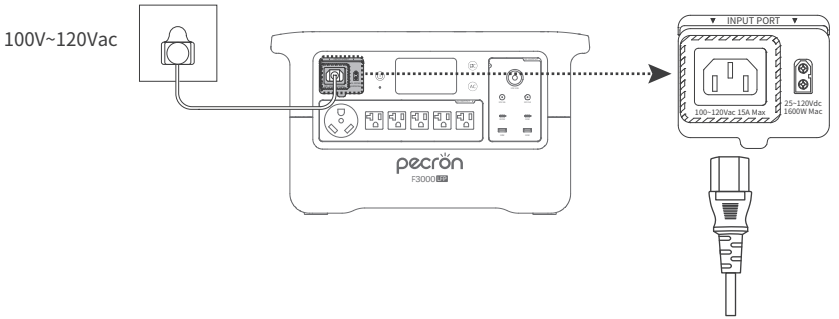
1: A mild odor may be present during high-power output from internal electrical components, which is normal and will naturally dissipate with daily use.
2: When charging with AC inputs of different frequencies, the power supply will automatically switch to the frequency consistent with the input.

DC OUTPUT TO POWER THE DEVICE



The portable power station can be used with other DC adapter cables (sold separately) to meet the charging needs of different types of devices through the DC output port.

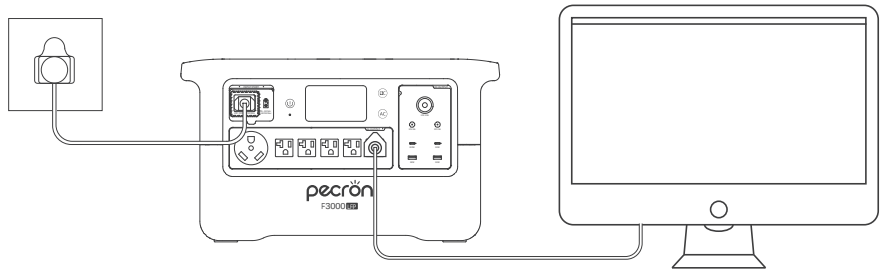
USING AC CHARGING



⚠ 1: Please disconnect the mains power after charging is complete.
2: To extend the battery core life and improve the user experience, please avoid discharging the battery to an excessive level, which may damage the battery cores.
3: During charging, if the battery core temperature is too high or too low, the temperature alarm icon on the screen will flash. To ensure battery core life and safety, the charging power will decrease, which is a normal phenomenon.

UPS FUNCTION

F3000 LFP supports UPS functionality. It provides nearly instantaneous (within 8 to 20ms) protection for loads (such as computers) against unexpected main power interruptions. In UPS mode, the power supply supports automatic restoration of AC output. If there is a power outage and the power supply is depleted, when mains power is restored, the power supply can automatically turn on AC output to continue powering the electrical equipment.
This UPS function only support protection for loads under 1800W(120V), we recommend that you only connect one device at a time to avoid overload and thus result in protection failure.
PECRON is not responsible for any devices damage or loss of data resulting from failing to follow the instructions.

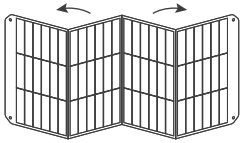


⚠ 1: Not suitable for specific applications requiring transmission times below 8ms, such as servers and workstations, as it may cause abnormal operation of the equipment or data loss.
2: This feature is not supported in some regions.
Please refer to local laws and regulations for details.

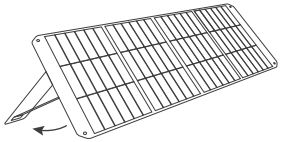
USING SOLAR PANELS CHARGING

Follow these steps

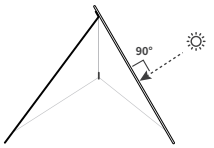
1: Unfold the solar panel and secure it using the bracket.



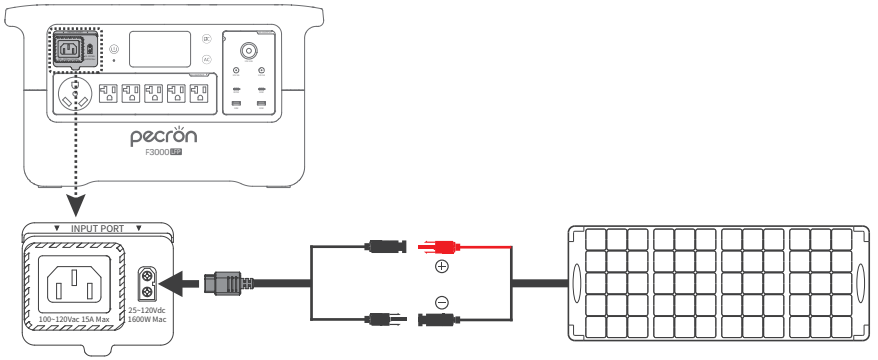
2: Adjust the bracket to change the angle of the solar panel to ensure it is directly aligned with the sunlight.

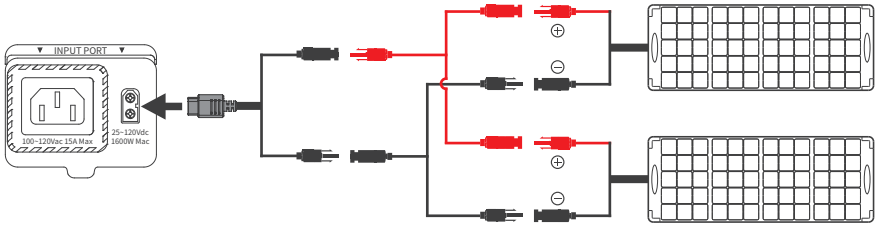


3: To improve solar charging efficiency, try to let sunlight vertically hit the solar panel and ensure there are no obstructions.



4: XT60 interface supports input voltage range of 25Vdc~120Vdc, maximum input power of 1600W, maximum current of 25A. When wired in series, the actual input voltage is the sum of all the connected solar panels, the total solar panels open-circuit voltage (Voc) must be less than 120V, and the operating voltage (Vmp) must be greater than 25V.
When wiring in parallel: the total solar current (Imp) should be close to the maximum input current (Imax) of the product interface.





This parallel charging cable sold separately

1: Do not mix different types of solar panels, as it may damage the unit.
2: PECRON solar panels are recommended to avoid damage to the adapter module and power supply.
3: When using solar charging, pay attention to avoid direct sunlight on the power supply and adapter module to prevent overheating and damage.
4: Be sure to clean the debris on the surface of the solar panel in time.
Partial shading on the solar panel will affect power generation efficiency.
5: Regularly clean the surface of the solar panel with a soft dry cloth dipped in water.

APP FUNCTION

You can connect to this product via the PECRON APP to view information, control the device, and make personalized settings.
Press and hold the power button for 5s while the device is off to reset the machine and enter pairing mode (for 3 minutes), at which point the Bluetooth/WIFI icon will flash.
iPhone users can search for PECRON in the Apple Store to download and use.
Android users can search for PECRON on Google Play to download and use.

GET IT ON Google Play

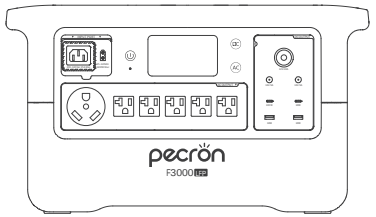
Download on the App Store

Wi-FI 2.4GHz is required for app connection.

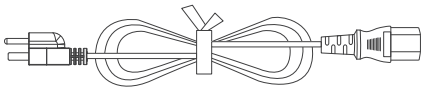
BATTERY EXPANSION PORT FUNCTION

Up to two 48V battery pack can be cascaded through the cascade cable using the XT120 socket on the right hand side of the machine.
Do not use non-PECRON battery pack, as it may damage the power supply!
Notes about cascade: Cascading will be faster if there is only 10% difference between the main power station and the expansion battery pack.
Battery expansion port (XT120) can output battery voltage (44V~58V) up to 40A through PECRON special inducer cable.

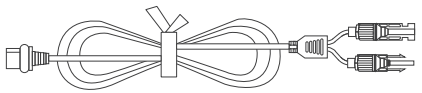
PACKING LIST



PECRON F3000 LFP *1

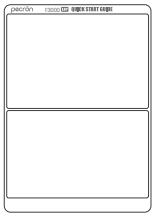


AC Cable *1

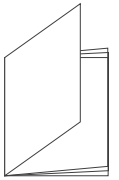


Single port XT60 to
MC4 solar charging cable *1

Accessory bag * 1

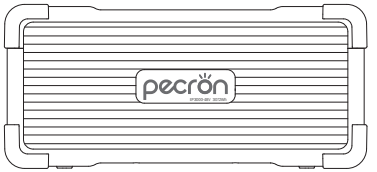


Quick Start Guide *1

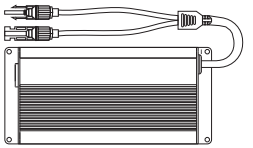


User Instruction *1

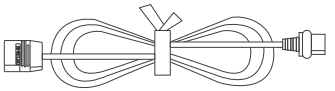
PRODUCT OPTIONAL ACCESSORIES



PECRON EP3000-48V



PECRON 500W
Smart Car Charger



PECRON XT120 Induction Output Cable

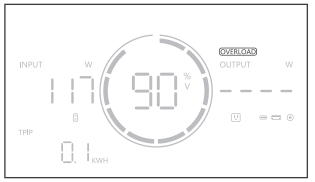
GET IT ON Google Play

Download on the App Store

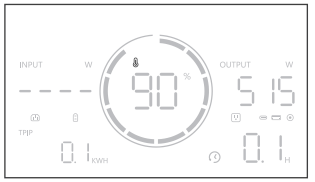
More accessories can be
found in PECRON official website

FAULT RESOLUTION

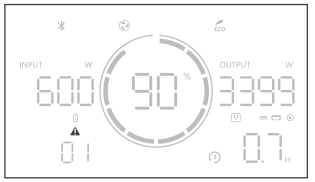
Output overload alarm interface:
OVERLOAD flashing
Buzzer alarm 2 times



Battery temperature alarm interface:
Temperature symbol flashing
Buzzer alarm 3 times



Other alarm interfaces: Exclamation mark flashes



ALARM ITEMS	
02	Battery pack undervoltage
03	Battery discharge overcurrent
04	Battery charge overcurrent
05	Battery short circuit
06	Battery disconnection
07	Battery low voltage, charging prohibited
08	Low charging temperature
09	High charging temperature
10	Low discharging temperature
11	High discharging temperature
12	Charging tube abnormality during discharging
20	Inverter overload
21	Inverter overtemperature
22	Busbar overvoltage/undervoltage
35	DC charging over-temperature
40	DC output short-circuit and overload
41	DC output overvoltage
42	DC output overcurrent
43	DC output over-temperature
51	Battery pack undervoltage
52	Battery pack discharge overcurrent
53	Battery pack charging overcurrent
54	Battery pack short circuit
55	Battery pack disconnection
57	Low temperature during the battery pack charging
58	High temperature during the battery pack charging
59	Low temperature during the battery pack discharge
60	High temperature during the battery pack discharge

FAQS

1: What kind of battery is used in F3000 LFP? How long it can last?

F3000 LFP utilizes high quality UL certified automotive LiFePO4 battery, it can retain 80% of its original capacity at 3500 complete charge cycles.

2: What devices can F3000 LFP power?

Please note that the AC output port can only charge or power devices that operate at less than 3600W(120V). DC output port can only charge or power that operate at less than 12V-10A.

3: Can the F3000 LFP be used as UPS?

F3000 LFP supports UPS function with an automatic switchover time of 8~20ms.

4: How to calculate the F3000 LFP running time?

To estimate the operation time of the F3000 LFP, consider the load you're applying:

Operation time = Battery Capacity (Wh) x DoD x n ÷ (Load Power + F3000 LFP Self-con-sumption)

Note: DoD is the depth of discharge. n is the conversion efficiency of the inverter, which is typically over 93% for the F3000 LFP. The self-consumption power of the F3000 LFP is approximately 30W.

Operation time =3072Wh x 95% x 93% ÷ (40W + 30W) ≈ 39 hours.

Please keep in mind that the estimated operation time provided is for referencepurposes and may vary based on actual usage conditions. Factors such as lowtemperature and excessive loads can sianificantly affect the battery capacity, leading toa reduction in the average operation time.

5: Can the F3000 LFP be charged while discharging?

Yes, It can be charged and discharged at the same time. Under the non-UPS state, if uninterrupted use is required, the average power of charging must be greater than the average power of electricity, otherwise the battery will eventually run out and shut down.

6: Does F3000 LFP have built-in MPPT charge controller?

Yes, there is one independent built-in MPPT controller; “XT60” port supports 25~120V(Max 1600W) PV input.

7: Other issues to be noted.

Pay attention to the ponit that the product is without waterproof function and prevent water getting into it.

Pay attention to ventilation and heat dissipation when using, and keep good ventilation at the air inlet and outlet of the product.

Do not use the product in special occasions (under the mine, gas station, etc.)

MAINTENANCE AND UPKEEP/CARE

1: Store the device in an environment between -20°C (-4°F) and 45°C (113°F). The recommended temperature range is approximately 0°C (32°F) to 30°C (86°F) to maintain the battery's health.

2: Store the product in a dry, cool, well-ventilated, and safe area to reduce the risk of drops.

3: Keep the device away from water sources, heat sources, strong magnetic fields, corrosive gas environments, and any flammable or explosive materials.

4: Fully charge the device at least once every two months. Prolonged partial charging may lead to inaccurate battery reading and degraded battery consistency.

5: For long-term storage, charge and discharge the product once every three months (fully charge, then discharge to 60% for storage) to maintain battery health.

6: Do not leave the device uncharged or unused for more than six months; otherwise, the warranty will be void.

7: If the power port is dirty, wipe it clean with a dry cloth. Do not use alcohol or other flammable agents to clean.

8: Do not disassemble or modify this product on your own.

DISCLAIMER

Please read the user manual thoroughly before using this product, and keep this manual in a safe place for future reference. Failure to follow the instructions for proper set up, use, and care for the device can increase the risk of serious personal injury, death, or property damage. Once you use this device, you are deemed to have understood, recognized and accepted all terms and contents of this document. The user shall be responsible for his own actions and all consequences arising from failure to use the device in accordance with the “User Manual”, or as authorized in PECRON's current product literature.

In compliance with laws and regulations, PECRON reserves all rights for final explanation, and to change these terms and conditions at any time without prior notice. In the event that any revisions are made, the revised terms and conditions shall be posted on our website immediately, please visit our website to inform yourself of any changes.

WARNING

1: Do not place the device near heat source, such as a fire or a heating furnace.

2: Do not immerse in any liquid, or expose the unit to rain or wet conditions.

3: Do not use the battery in a strong static electricity or electromagnetic environment.

4: Do not disassemble or puncture the product with sharp objects in any way.

5: Short circuits can be caused by: vermin or pests chewing through wires; water or other fluids coming into contact with electrical wiring.

6: It's prohibited to be used as car jump starter, only can be used to charge the car battery.

7: Do not use accessories or parts other than those provided by PECRON. Please visit our website www.pecron.com or reach our support team for a complete list of accessories and parts.

8: When using this product, please strictly follow the ambient temperature for use in the user manual. If the temperature is too high, the battery can potentially result in self-combustion and will burst into flames, which can cause widespread damage. If the temperature is too low, the performance of the battery will be seriously degraded, and it may even fail to meet the normal use requirements.

9: Do not stack heavy objects on this product.

10: Do not block the air vents during use, or leave the device in a non-ventilated or dusty space.

11: Please avoid impacts, fall off, and violent vibration. Please turn off the device immediately and stop using it in the event of major exterior impact. Please fasten the unit firmly during transportation to avoid vibration and impact.

12: In the event of immersing the device into the water accidently, please place the unit in a safe open area and keep away from the unit until it is completely dry. The dried unit should not be reused and should be disposed of properly according to the local regulation. If the device catches fire, use the fire extinguishing equipment in the following recommended order: water or mist, sand, fire blanket, dry chemical, carbon dioxide fire extinguisher.

13: Please wipe it with a dry cloth to clean the surface of the device.

14: Please place this device with care to prevent the product from being damaged due to fall off. If the product is damaged due to fall off, please turn off the unit immediately and place it in an open area, keep away from combustibles and crowds, and dispose of in accordance with local laws and regulations.

15: Please store this device in a place out of reach of children and pets.

DISPOSAL

1: When conditions permit, please be sure to completely discharge the battery of this product, and then put the product in the designated battery recycling box. This product contains batteries. Batteries are dangerous chemicals and are strictly prohibited from being disposed of in ordinary trash. For details, please follow local laws and regulations onbattery recycling and disposal.

2: If the battery cannot be completely discharged due to the failure of the product itself, please do not dispose of the battery directly in the battery recycling box, and contact a professional battery recycling company for further disposal.

3: The battery will not be able to start after being over-discharged, please dispose of it according to the principle of disposal.

EXCLUSIONS

PECRON’s warranty does not apply to：

Misused, abused, modified, damaged by accident, or used for anything other than normal consumer use as authorized in PECRON’s current product literature.