Safety Instructions and Compliances

Disclaimer

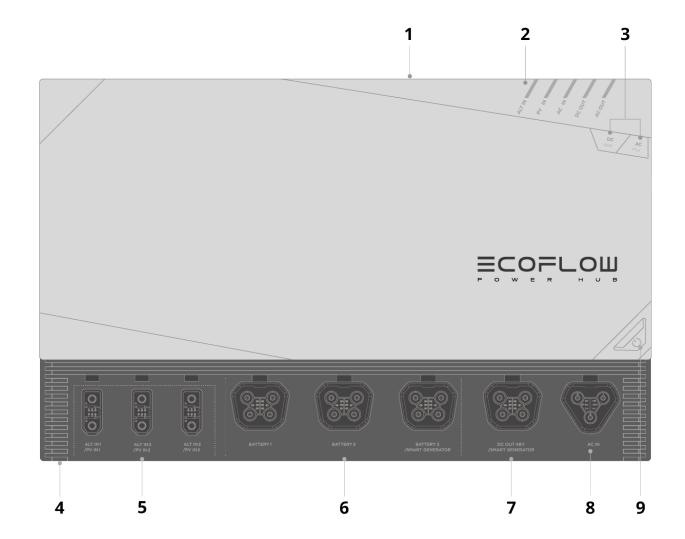
Regulatory Compliance

Appendix

What's in the Box

Materials and Tools

Technical Specifications



- 1 Air outlet on the top
- 2 LED indicator
- 3 DC button and AC button

When the power is on, short press the DC or AC button to enable DC or AC output. Short press the DC or AC button again to disable DC/AC output.

- 4 Air inlet on the bottom
- 5 PV IN / ALT IN port (x3)

Connect with solar panels or alternators for charging.

6 BATTERY port (x3)

Connect with EcoFlow 2kWh/5kWh LFP battery, EcoFlow generator, EcoFlow Power Dock, EcoFlow WAVE 2, or 48V alternator.

7 DC OUT 48V / Smart Generator port

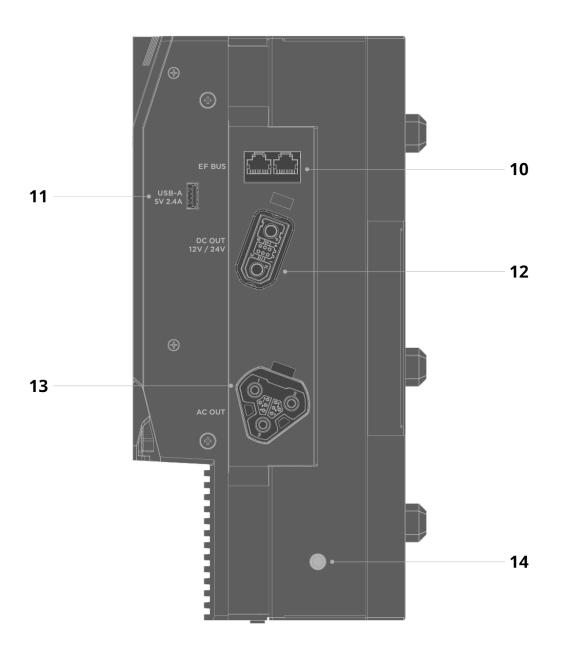
Connect with third-party 48V DC appliance or 48V alternator.

8 AC IN port

Connect with the shore power inlet, EcoFlow generator or third-party generator.

9 Main power button

Flip up the button cover, and long press 3 seconds to power on/off the system. The button will light up after powering on, breathing in white.



10 EF BUS port

Connect with EcoFlow PowerInsight series (Power Kit console), EcoFlow Power Link, EcoFlow AC/DC Smart Distribution Panel series, or terminator resistors.

11 USB-A

Connect with GPS or a 5V air fan.

12 DC OUT 12V/24V port

Connect with EcoFlow AC/DC Smart Distribution Panel series.

13 AC OUT port

Connect with EcoFlow AC/DC Smart Distribution Panel series.

14 Earth stud

LED Indication

Charging and Discharging Status

	Solid White	Breathing White	Blinking Orange
ALT IN PV IN AC IN	When Alternator, Solar or AC charging is turned on, voltage is detected but not charging yet	Charging	Error
DC			

OUT	Power supply to DC appliances	1	Error
AC OUT	Power supply to AC appliances	1	Error

If the orange light is on, see the fault on the console or in the app for troubleshooting.

Bluetooth and Wi-Fi Status

Press and hold the AC and DC buttons at the same time for 3 seconds to display the Bluetooth and Wi-Fi status.

The alternator, PV and AC input indicators will always be white. The DC output indicator will show the Bluetooth status, while the AC output indicator will show the Wi-Fi status.

After 3 minutes, the status will turn back to the charging and discharging status automatically.

	Solid White	Blinking White	Off
DC OUT	Bluetooth connected	Bluetooth broadcast mode. No connection	Bluetooth is off
AC OUT	Wi-Fi connected	Router connected. No network connection	Wi-Fi disconnected

Other Status

Indicator	Status
All the 5 indicators display white in sequence	Device power on
All the 5 indicators blink for 3 times, then go off	Device power off
All the 5 indicators breathing white	Updating
ALT/AC_INPUT/AC_OUTPUT indicators blink white 3 times	Bluetooth reset/switching AC frequency

Installation

Environmental Requirement

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WARNING

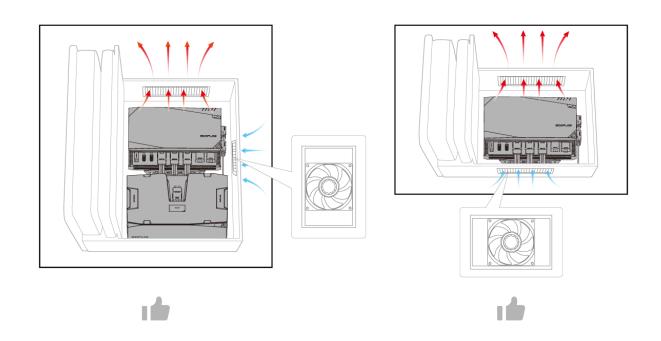
- This device is not ignition-protected. Avoid serious injury or death from fire or explosion. Do not install in compartments containing gasoline-fueled engines or gasoline tanks, or in areas where ignition-protected equipment is required.
- Ensure there is adequate space for the dissipation of heat: at least 50 mm (2 in.) on the left side; at least 100 mm (4 in.) on the top, bottom, and right side.
- · When used at sea
 - Install the product in a dry and stable environment with minimal airflow to prevent external moisture. Ensure there is adequate space for the dissipation of heat. Recommended operating conditions are 20-25°C (68-77°F) and a relative humidity of about 50%.
 - To avoid corrosive fumes, the hub shall not be installed directly over lead-acid batteries.
 - Do not install the hub at the bilge.
- If there is an obstruction at the air inlet or outlet, you should make ventilation holes in the obstruction, with the open area consistent with the hub's heat vent (720 cm² / 112 in²), and with an opening rate of more than 70%.

Heat dissipation requirements for enclosed space:

The air inlet and outlet should be installed to ensure heat dissipation in the enclosed space.

- Install a fan in the air inlet, the area of the opening area is suitable for the fan, and the open area ratio is more than 50%.
- Choose an axial fan, 5V or 12V, with a size larger than 80x80x25 mm.
 - Connect a 5V fan to the USB-A port of the hub.
 - Connect 12V fan through EF BUS port of Hub using the RJ45 splitter.
- The air inlets and outlets should not be on the same side or too close to each other, otherwise hot air circulation will occur and the purpose of heat dissipation cannot be achieved.
- The air inlet and outlet directions should preferably be straight. If it cannot be achieved due to the installation of batteries or other reasons, holes can be cut on the side or top of the hub.
- Both the air inlet and outlet need to be set up. One-way openings are ineffective for heat dissipation.

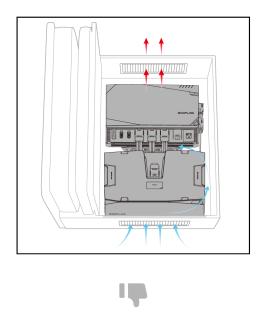
Open area ratio, or named as perforation rate, is a measure of the proportion of the total surface area of a panel or vent that consists of open spaces or holes allowing air to pass through.

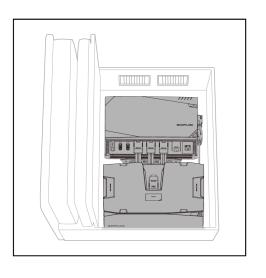


Incorrect examples:

On the left figure, the battery blocks the wind. The wind path is twisted with large wind resistance, the heat dissipation effect is poor, and the noise becomes larger, triggering over-temperature protection.

On the right figure, there is no air inlet.





Mounting Procedure

The Power Hub 5kVA can be wall-mounted and surface-mounted. Do not install the hub upside down.

Follow these steps:

- 1. Mount the back bracket using ST6.3x25 mm screws.
- 2. Fix the top and bottom brackets to the hub using M5x10 mm screws.
- 3. Insert the hub onto the back bracket.
- 4. Fix the top and bottom brackets to the wall using ST6.3x25 mm screws.



WARNING

Remove the protective film at the top, bottom and side heat vents to ensure proper heat dissipation.

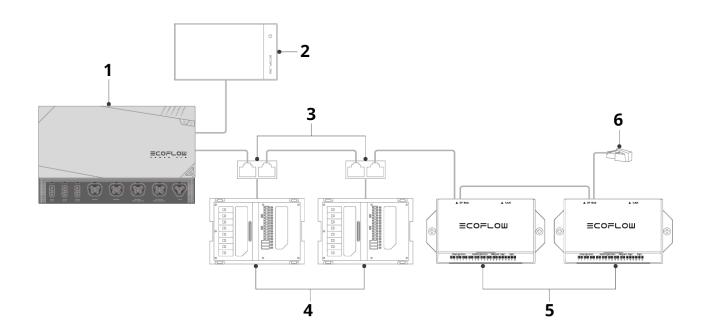
Grounding Consideration

• The EcoFlow Power Kits system uses a floating ground, protecting the system from ground loops and short circuits.

- The battery negative will be connected to the main grounding system from the smart distribution panel connected to the hub.
- The hub can be connected to the shore power ground through the AC IN cable.
- Use the earth stud located externally on the right side for grounding if necessary. The ground conductor should be at least 6 mm² (8 AWG).

Communication Requirement of the Power Kits 5kVA System

- The EF BUS ports in the Power Kits system support communication among each other.
- Connect EcoFlow Power Link and smart distribution panel to Power Hub 5kVA serially.
- Communication cable: 24 AWG, the total length of the system should be less than 21 m (69 ft)
 - The length of connecting the hub and distribution panel should be as short as possible, less than 18 m (59 ft)
 - The length of the branch line connected to the distribution panel should be less than 30 cm (11.8 in.).
- There are two EF BUS RJ45 ports in the hub, connecting one with Power Kit Console, and the other with other accessories. If you only use one EF BUS port on the hub, connect a termination resistor to another EF BUS port.
- Connect the termination resistor to the end of the communication line.



- 1 EcoFlow Power Hub 5kVA
- 2 EcoFlow PowerInsight series (EcoFlow Power Kit Console)
- 3 RJ45 splitter
- 4 EcoFlow Smart Distribution Panel series
- 5 EcoFlow Power Link
- 6 Termination resistor



If the communication does not work properly, check the connection or shorten communication wiring length.

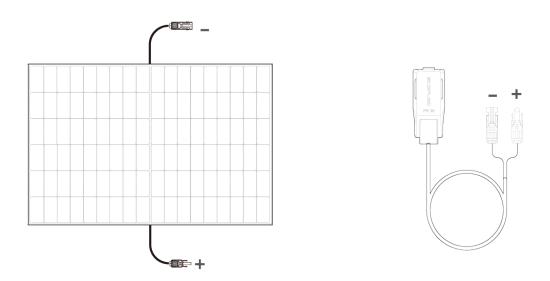
Connection of Charging

Solar Charging

The Power Hub 5kVA has 3 PV input ports, with a total power of 7200W for 3 ports (4000W for PV IN 1, 1600W for PV IN 2&3).

You can switch the charging type between ALT and PV in **Settings** > **DC charging type**. The default type is Auto, indicating the charging type is auto identified.

Use the Solar charging cable to connect with EcoFlow or third-party solar panels meeting specifications. You might need a roof combiner box to cover the hole for the wire drop through the RV roof.



To test the polarities of the wires from the hub: Use the multimeter buzzer to measure the conduction between the P pole of the PV connector and the +, and between the N pole and the - in the figure.

To test the polarities of the wires for solar panels: The conduction between the positive polarity of the solar panel and +, and between the negative polarity and - in the figure.

Remcommended schemes for solar charging:

Solar Panel	Scheme
EcoFlow 100W flexible or rigid solar panel	2S or 2P for each port
EcoFlow 175W rigid solar panel	2S or 2P for each port
EcoFlow 400W rigid solar panel	2S or 2P for each port

Alternator Charging

• Via the ALT IN 1/2/3 Port

You can connect the alternator to the ALT IN 1/2/3 port (4000W for ALT IN 1, 1600W for ALT IN 2&3). To be more effective, use 2 ALT IN connection cables and connect the 12V alternator via 2 ALT IN ports to the hub.

You can switch the charging type between ALT and PV in **Settings** > **DC charging type**. The default type is Auto, indicating the charging type is auto identified.

Vehicle Alternator System Supported	Vehicle Alternator Voltage
12V	<13V
24V	<26V
48V	<52V

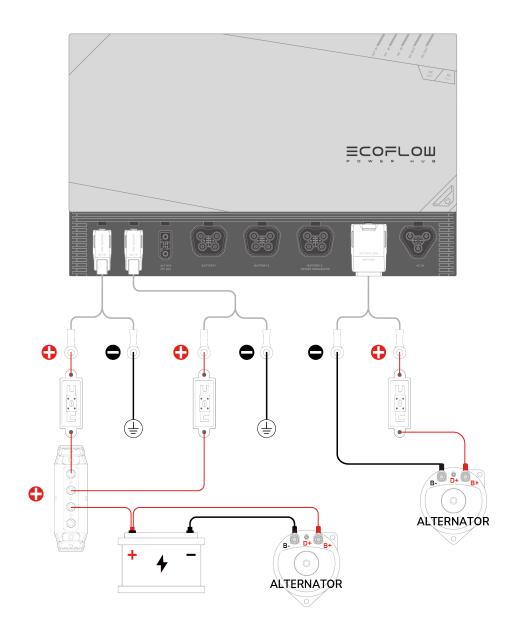
Alternator charging will stop to protect vehicle starter battery from overdischarging.

• Via the BATTERY 1/2/3 port, or "DC OUT 48V / Smart Generator" port

You can connect the 48V alternator to the BATTERY 1/2/3 port, using the BATTERY connector, 4 AWG (21 mm²) cables in less than 6 m (20 ft) with OT terminals. Install fuses that meet the fuse derating factor on the positive connection cables.

Use a network cable to connect the alternator and the CAN port on EcoFlow Power Link for communication.

For using EcoFlow Power Link, see EcoFlow Power Link_User Manual for details.





- Connecting via the "DC OUT 48V / Smart Generator" port is recommended. In this case, alternator charging data can be read on the console or in the app.
- Power Hub 5kVA is also compatible with smart alternators.
 Compare to regular alternators, smart alternators deliver a variable output voltage and may shut down which are controlled by the vehicle ECU (Electronic Control Unit) when not needed. For detailed connections and usage instructions regarding smart alternators, please follow the instructions from chassis manufacturers or professional body builders.

Generator Charging

The Power Hub 5kVA supports DC or AC charging by an EcoFlow or third-party generator.

• DC charging via the SMART GENERATOR ports

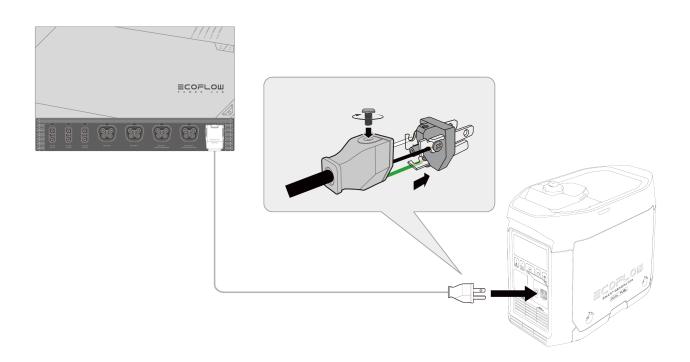
To connect a EcoFlow generator:

- 1. Use the extra battery connection cable and Smart Generator Adapter to connect to the hub.
- 2. Plug the other end to the extra battery port.
- 3. In the EcoFlow app, go to Input > Smart Generator to adjust auto-start and auto-shutoff settings.

AC charging via the AC IN port

To connect an EcoFlow or third-party generator:

- 1. Insert the live, ground, and neutral conductors of the AC charging cable into an AC plug (not included). See the figure below for reference.
- 2. Plug the cable into the AC IN port of the generator.



A

NOTICE

Connect a switch between the hub and the generator.

The Power Hub 5kVA supports 30A and 50A shore power inlet.

- For 30A, insert the L/N/PE of the AC charging cable into the shore power inlet and connect the other end to the hub via the AC IN port.
- For 50A, insert the L/N/PE of the AC charging cable into the shore power inlet and connect the other end to the hub via the AC IN port. Then, connect another live conductor and N/PE to the 30/50A AC/DC Smart Distribution Panel.

See the user manual of your shore power inlet for instructions.

You can adjust the currents via EcoFlow App or Power Kit Console in Settings

> Input current setting > AC charging current or AC input current.

Connection of Batteries

The Power Hub 5kVA supports connecting 3 2kWh/5kWh LFP batteries directly.

Use EcoFlow Power Dock as a battery switch if necessary.

To connect more batteries, you can connect the EcoFlow Power Dock via BATTERY 1/2/3 ports for extension. Up to 9 batteries are supported. See EcoFlow Power Dock_User Manual for details.

Connection of Appliances

Smart Distribution Panel series

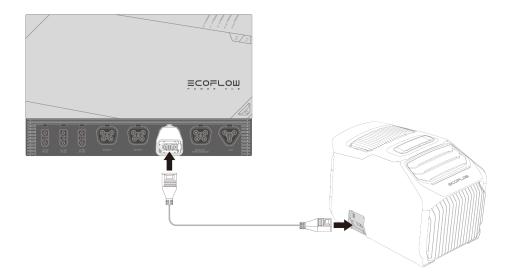
You can connect with AC/DC Smart Distribution Panel series (EFM100-LD, EF-PK-O05-2). See the user manual of the AC/DC Smart Distribution Panel for details.

EFM100-LD (LV): EcoFlow 30A AC/DC Smart Distribution Panel_User Manual_EN (V1.3)

EF-PK-O05-2: EcoFlow 30/50A AC/DC Smart Distribution Panel_User Manual

EcoFlow WAVE 2

You can connect EcoFlow WAVE 2 via the BATTERY 1/2/3 ports, using the extra battery connection cable and Smart Generator Adapter.



48V Appliances

You can connect third-party 48V appliances using a BATTERY connector and a

4 AWG (21 mm²) cable via the DC OUT 48V port. Install a fuse on the positive connection cables. Choose the fuse according to your appliances and meet the derating factor of the fuse.

Other Connection

Sensors

Connect sensors and auto start/stop or engine and generator via EcoFlow Power Link for central control.

See the EcoFlow Power Link_user manual of for details.

Global Positioning System (GPS)

Using the GNSS from EcoFlow (sold separately) is recommended, which supports GPS, Beidou, Galileo, and GLONASS.

Connect the module to the USB-A port, and check your positioning in the EcoFlow app.

Management

Download EcoFlow App

EcoFlow offers a companion app for device management. With this mobile application, you can:

- Enjoy all-in-one control of your EcoFlow devices from anywhere.
- Monitor power consumption details seamlessly with real-time updates.
- Personalize your energy scheme with an array of customizable options.
- Promptly receive in-app troubleshooting and firmware updates.



Scan the QR code or download it at: https://download.ecoflow.com/app

Control via Phone

With the EcoFlow app, you can manage all your EcoFlow binding devices on your phone.

The Power Hub 5kVA supports Wi-Fi (2.4G & 5G) and Bluetooth connections, adapting to varying network conditions to ensure convenient access to device settings.

With Internet

When Wi-Fi is stable, you can access the device settings via the internet. This method is always recommended to ensure your EcoFlow device can receive timely firmware updates and pushes.



Without Internet

If the Wi-Fi connection is limited, you can manage the device locally via Bluetooth.



To reset Bluetooth for pairing with the Power Kits using a different phone:

Press and hold the DC button on the hub for more than 3 seconds till the ALT input, AC input, and AC output indicators light up in sequence.

The 3 indicators will blink for 5 times, indicating the reset is successful.



NOTICE

The effective range of the Bluetooth connection is 15 m.



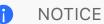
- Share the device with Wi-Fi connection, and the owner and all users with sharing permission will have the same permissions for all the features.
- To control the Power Kits anytime, anywhere, you must connect the system to the network.
- To carry out the firmware update for Power Kits, a network request to the Internet using the IoT connection is required to complete the download and verification of the update package.

Control via Power Kit Console

You can control and monitor the Power Kits system via Power Kit Console. The console is wired to connect with the Power Kits. Connect the console via the EF BUS port using the RJ45 CAN Bus Cable.

See the user manual of the Power Kit Console for details.

Firmware Update



Before the update:

- Make sure the app version is up to date.
- Connect all the EcoFlow accessories (batteries, EcoFlow Power Dock, and so on) to the Power Hub 5kVA for updating the whole system.
- Make sure the Power Hub 5kVA communicates properly.
- To prevent a failed update, remove the inputs of the Power Kits, and turn off the outputs in the EcoFlow APP and Power Kit Console.

To update Power Kits, tap **Settings** > **Firmware update** > **Update** in the app or tap **About** > **Update** on the console.



- The EcoFlow app can not update the console. Therefore, updating the system on the console is recommended.
- For batch updates, please contact EcoFlow customer service.

Power on or off the System

Power on

After connection, flip the main button cover and long press the main power button of the hub (or the power button of the LFP battery, the power button on the Power Kit Console) 3 seconds to power on the system.

The 5 indicators at the upper right corner of the Power Hub will then light up in sequence from left to right. If the main power indicator is in the breathing state, the device is turned on successfully.

Power off



NOTICE

- Ensure there is no charging input to the hub before shutting down the Power Kits. The system will not be turned off if input is detected.
- The system also can not be turned off when updating.
- To turn on the system again, wait for at last one minute after shutting down.
- Long press the main power button of the hub (or the power button of the LFP battery, the power button on the Power Kit Console) 3 seconds to power off the system. The indicators will blink for 3 times, and the main power indicator turns off.
- 2. Wait 5 seconds to let the system completely shut down before further operation after pressing the main power button.



You can set auto shutting down in **Settings** > **More** > **Standby duration**. The default setting is never to shut down. The feature minimizes energy wastage when the Power Kits are not in use.

Explore more

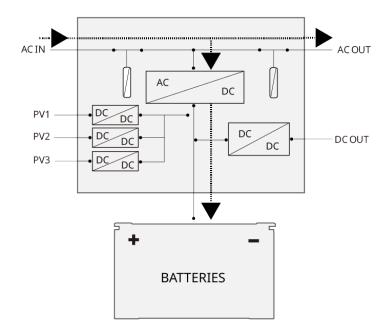
Bypass Mode

The system will enter the bypass mode if:

- external AC power is connected
- AC output is switched on
- "AC charging" or/and "Prioritize grid usage" is switched on

In this mode, the AC output is provided by the external AC power and the LFP battery is charged by external AC power.

The Power Kits can supply emergency power like EPS. When external AC power is not available, the system will automatically transfer to the inverter mode, AC output will restore power within 30 ms.



Prioritize Grid Usage

You can choose to use battery power or grid power when the product is connected to external AC power, the AC output is switched on, and AC charging is switched off.

If the feature of Prioritize grid usage is enabled, the system uses grid power.

If the feature of Prioritize grid usage is disabled, the system uses battery power.

X-Fusion (Power Assist)

X-Fusion will be turned on automatically, if:

- external AC power is connected
- AC output is switched on
- "AC charging" is switched on
- The load current is greater than the set AC input total current

Intelligent detection of insufficient shore power allows the hub inverter to parallel with the grid to supplement the power shortfall, achieving up to 5kVA power output.

Even in scenarios with weak or unstable shore power, the system ensures the supply of optimal power and current.

Charging Priority

Power Hub 5kVA supports multiple charging inputs simultaneously, and the charging priority is listed below:

- 1. solar charging
- 2. AC charging
- 3. alternator charging
- 4. generator DC charging

When the charging rated power is greater than the power required by the battery, the charging input with lower priority will reduce the charging current smoothly or even stop charging.

Vehicle idle charging

The built-in mobility sensor of the hub can detect when the vehicle is being driven. By default, the vehicle's alternator can be used to charge the Power Kits only when the vehicle is moving.

If you want to charge the Power Kits when the vehicle is parked and idling, you can switch on **Charge while idling** in **Settings** > **Input setting** in the EcoFlow APP or on the console.



The default battery voltage that triggers protection is 13.2V (or 26.4V/52.8V, and depends on the battery specifications of the alternator). To maintain the battery voltage at 14V as much as possible, the vehicle idle charging switch should be switched off after the vehicle is turned off.

GFCI Protection

You can connect an external GFCI protector to protect from electric shocks if required. The internal GFCI function of Power Hub 5kVA is always on (ground relay remains closed) and no special operation is needed to enable GFCI protection.

If you connect the Power Hub 5kVA will shore power, the hub will turn off the GFCI automatically (ground relay automatically disconnects).

AC and DC Overload Protection Strategies

AC Overload Protection

Power overload
 When the device is operating normally and not in the bypass mode, the

power is the overload condition. An overload fault will be reported if the condition is reached. Power overload can be divided into active power overload and apparent power overload. The details are as follows:

Active Overload	
Overload Wattage	Duration
(4000×1.05)W	3 minutes
(4000×1.1)W	1 minute
(4000×1.3)W	1 second
(4000×1.5)W	0.38 second
Apparent Overload	
Overload Wattage	Duration
Overload Wattage (5000×1.05)VA	Duration 3 minutes
(5000×1.05)VA	3 minutes

• Bypass current overload

In the bypass mode, the external AC power supplies the AC appliances, and the current is the overload condition. An overload fault will be reported if the condition is reached. If the AC input current is modified, the overload current will be adjusted accordingly. The details are as follows:

Overload Current	Duration
(50×1.05)A	60 seconds
(50×1.3)A	1 second
(50×1.5)A	0.38 second

DC Overload Protection

There are 12V and 24V voltage platforms for DC output, and the overload conditions for the different voltage platforms are different. The details are as follows:

- If the DC output is 13.6V, and the rated output current is 100A, this can be overloaded to 200A for 1 second or 150A for 30 seconds. If the voltage is below 13.6V×0.6 and higher then 5V for 2 seconds, an overload fault will be reported.
- If the DC output is 26.4V, the rated output is 70A. This can be overloaded to 100A for 3 seconds. If the voltage is below 26.4×0.6 and higher then 5V for 2 seconds, an overload fault will be reported.

Safety Instructions and Compliances

Disclaimer

Please read the product document and ensure that you understand it fully before using the product. After reading this document, keep it for future reference. Improper use of this product may cause serious injury to yourself or others, or cause product damage and property loss. Once you use this product, it is deemed that you understand, approve and accept all the terms and content in this document. EcoFlow is not liable for any loss caused by the user's failure to use the product in compliance with the product document. In compliance with laws and regulations, EcoFlow reserves the right to the final interpretation of this document and all documents related to the product. This document is subject to changes (updates, revisions, or termination) without prior notice. Please visit EcoFlow's official website to obtain the latest product information: https://www.ecoflow.com/.

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Important Safety Instructions

Environment

- 1. WARNING: This device is not ignition protected. Avoid serious injury or death from fire or explosion. Do not install in compartments containing gasoline-fueled engines or gasoline tanks, or in areas where ignition-protected equipment is required.
- 2. The product is not waterproof, avoid exposing it to water.
- 3. Ensure that there is always sufficient free space around the product for ventilation, and those ventilation openings are not blocked. Install the product in a heatproof environment. Ensure therefore that there are no chemicals, plastic parts, curtains or other textiles, etc. in the immediate vicinity of the equipment.
- 4. If installed in an enclosed space, a fan is required at the air inlet.
- 5. Keep this product out of the reach of children and pets.

Operation

- 6. RISK OF ELECTRIC SHOCK: Disconnect all sources of supply before servicing.
- 7. This product is a safety class I device (supplied with a ground terminal for safety purposes). Its AC input and/or output terminals must be provided with uninterruptible grounding for safety purposes. An additional grounding point is located on the outside of the product. The ground conductor should be at least 6 mm² (8 AWG). If it can be assumed that the grounding protection is damaged, the product should be taken out of operation and prevented from accidentally being put into operation again; contact qualified maintenance personnel.
- 8. Ensure the product is well fastened during transportation and usage to avoid shaking and impacts.
- 9. RISK OF ELECTRIC SHOCK: Do not plug or unplug any devices that are already powered on. Also ensure that connections to this product are secure.
- 10. Do not operate this product with a damaged cable or connector.
- 11. EcoFlow 2kWh/5kWh LFP battery shall be installed, commissioned,

- maintained, and disposed of in accordance with the user manual of the battery.
- 12. Do not use in connection with life support systems or other medical equipment or devices.
- 13. Refer to local regulations regarding grounding of autonomous power systems. It is recommended to install a Ground Fault Circuit Interrupter (GFCI), also known as Residual Current Device (RCD) in the AC input and AC output of the Power Hub and sub-circuits of distribution panel.

Maintenance

- 14. The product contains no internal user-serviceable parts.
- 15. If there is dirt on the ports of the product, clean them with a dry cloth.
- 16. If there is blockage and congestion at the air inlet, air outlet, or air ducts on the electrical equipment enclosure containing this product, clean them up.

Use on Boat

- 17. When used at sea, install the product in a dry and stable environment with minimal airflow to prevent external moisture. Ensure there is adequate space for the dissipation of heat. Recommended operating conditions are 20-25°C (68-77°F) and a relative humidity of about 50%.
- 18. To avoid corrosive fumes, the Power Hub shall not be installed directly over lead-acid batteries.
- 19. Conductors shall be provided with overcurrent protection device(s) as per ABYC E-11, AC & DC Electrical Systems on Boats
- 20. A battery switch or other means of disconnection independent from a BMS shall be installed for each battery or battery bank in addition to an output disconnect device.
- 21. A battery switch shall be mounted in a readily accessible location as close as practicable to the battery.
- 22. A battery switch or other means of disconnection shall comply with requirements of ABYC C-7, Battery Switches for Use on Boats if applicable, and be installed in accordance with ABYC E-11, AC & DC Electrical Systems on Boats or ABYC E-30, Electric Propulsion Systems if applicable.

Regulatory Compliance

FCC Compliance Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user

will be required to correct the interference at his own expense.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator & your body.

IC Compliance Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil nedoit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

When using the product, maintain a distance of 20 cm from the body to ensure compliance with RF exposure requirements.

Il doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et toute partie de votre corps.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

Lorsque l'appareil fonctionne dans la gamme de fréquences de 5150 à 5350 MHz, il est limité à une utilisation en intérieur uniquement.

Appendix

What's in the Box

- EcoFlow Power Hub 5kVA
- Installation Template (x1)
- Brackets (x3)
- ST6.3x25mm (x13)
- M5x10mm (x8)
- Termination resistor (x2)

Materials and Tools

The following materials or tools might need to be prepared or purchased separately, including but not limited to:

Cables

- EcoFlow Power Hub DC Main Out Cable 3 AWG or 6 AWG
- EcoFlow Power Hub AC Main Out Cable 6 AWG or 10 AWG
- EcoFlow Power Hub AC Charge Cable
- EcoFlow Power Hub Solar Charge Cable
- EcoFlow Power Hub Alternator Charge Cable
- network cable
- RJ45 splitter
- EcoFlow BATTERY connector
- EcoFlow Smart Generator Adapter
- Drill Φ 4 mm (0.16")
- PH2 screwdriver

Technical Specifications

General	
Model	EF-PK-H05-1
Weight	Approx. 15.7 kg (34.6 lb)
Dimensions (W×D×H)	480x151x300 mm (18.9x5.9x11.8 in.)
Input	
Alternator Input 1 PV Input 1	13-60V100A, 4000W Max
Alternator Input 2/3 PV Input 2/3	13-60V30A, 1600W Max per port
AC Input (Charge Only)	Low Voltage Power Hub: 100-120V~, 4000W Max, 50Hz/60Hz High Voltage Power Hub: 220-240V~, 4000W Max, 50Hz/60Hz
AC Input (Bypass Mode)	Low Voltage Power Hub: 100-120V~50A Max, 50/60Hz High Voltage Power Hub: 220-240V~50A Max, 50/60Hz
Output	
AC Output (Discharge Only)	Low Voltage Power Hub: 120V~4000W Max, 5000VA Max, 60Hz, continuous output 33.3A (surge 7500VA 380ms, 10000VA Max) High Voltage Power Hub: 220-240V~4000W Max, 5000VA Max, 50/60Hz, continuous output 18.18A (surge 7500VA 380ms, 10000VA Max)
AC Output (Bypass Mode)	Low Voltage Power Hub: 100-120V~50A Max, 50/60Hz High Voltage Power Hub: 220-240V~50A Max, 50/60Hz
X-Fusion (Power Assist)	Low Voltage Power Hub: 33.3A, 5000VA Max High Voltage Power Hub: 18.18A, 5000VA Max
DC Output 12V/24V	13.6V100A, 1360W Max 26.4V60A, 1584W Max
DC Output 48V	40-57.6V55A, 3168W Max

USB-A Output 5V-2.4A Max EF BUS Output (x2) 12V-Total 1.2A Max Total Output Power 8752W Max (AC 4000W + DC (12V/24V) 1584W + DC (48V) 3168W) Battery Port (x3) 40-57.6V-100A Max per port, total 270A Max Discharge 40-57.6V-100A Max per port, total 181A Max Smart Generator Port 40-57.6V-100A Max Charge via the "8ATTERY 3 / Smart Generator" Port 40-57.6V-100A Max Charge via the "48V DC Output / Smart Generator" Port 40-57.6V-70A Max Charging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity 0%-95% RH (non-condensing) Altitude \$2,000 m (6,562 ft) Compliance UL 1012, UL 1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 60335-2.29, AS/NZS 60335.1, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 60305.1, AS/NZS 60335.2.29, AS/NZS 6000-3-11 EN IEC 61000-6-2 EN IEC 61000-3-12 EN 301489-17 EC ER 10.06 IEC 60533 EC Part 15 Subpart B		
(x2) 12V=Total 1.2A Max Total Output Power 8752W Max (AC 4000W + DC (12V/24V) 1584W + DC (48V) 3168W) Battery Port (x3) 40-57.6V=100A Max per port, total 270A Max Discharge 40-57.6V=100A Max per port, total 181A Max Smart Generator Port 40-57.6V=100A Max per port, total 181A Max Charge via the "48V DC Output / Smart Generator" Port 40-57.6V=100A Max Environment -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity 0%-95% RH (non-condensing) Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62368-1, IEC/EN 62365-2.29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-3-11 EN IEC 61000-3-11 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-17 ECE R10.06 IEC 60533 ECE R10.06 IEC 60533	USB-A Output	5V2.4A Max
Power 3168W) Battery Port (x3) Kername Charge 40-57.6V=100A Max per port, total 270A Max Discharge 40-57.6V=100A Max per port, total 181A Max Smart Generator Port 40-57.6V=100A Max per port, total 181A Max Charge via the "BATTERY 3 / Smart Generator" Port 40-57.6V=100A Max Charge via the "48V DC Output / Smart Generator" Port 40-57.6V=70A Max Environment Charging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity 0%-95% RH (non-condensing) Altitude <2,000 m (6,562 ft)		12VTotal 1.2A Max
(x3) Charge 40-57.6V=100A Max per port, total 270A Max Discharge 40-57.6V=100A Max per port, total 181A Max Smart Generator Port 40-57.6V=100A Max Charge via the "BATTERY 3 / Smart Generator" Port 40-57.6V=100A Max Charge via the "48V DC Output / Smart Generator" Port 40-57.6V=70A Max Environment Charging Temperature −25°C to 60°C (−13°F to 140°F), derating>40°C (104°F) Storage Temperature −25°C to 70°C (−13°F to 140°F), derating>40°C (104°F) Operating Humidity 0%-95% RH (non-condensing) Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-6-4 EN IEC 61000-3-12 EN 301489-17 ECE R10.06 IEC 60533 EN IEC 61000-3-12 EN 301489-17 ECE R10.06 IEC 60533	•	
Discharge 40-57.6V = 100A Max per port, total 181A Max Smart Generator Port 40-57.6V = 100A Max Charge via the "BATTERY 3 / Smart Generator" Port 40-57.6V = 100A Max Charge via the "48V DC Output / Smart Generator" Port 40-57.6V = 70A Max Environment -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity 0%-95% RH (non-condensing) Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-17 EC R10.06 IEC 60533 EN 301489-17 ECE R10.06 IEC 60533	_	
Smart Generator Port Charge via the "BATTERY 3 / Smart Generator" Port 40-57.6V = 100A Max Charge via the "48V DC Output / Smart Generator" Port 40-57.6V = 70A Max Environment Charging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity 0%-95% RH (non-condensing) Altitude ≤2,000 m (6,562 ft) Compliance Safety UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62346-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-17 EC R10.06 IEC 60533 EN 301489-17 EC R10.06 IEC 60533	Charge	40-57.6V-100A Max per port, total 270A Max
Charge via the "BATTERY 3 / Smart Generator" Port 40-57.6V=100A Max Charge via the "48V DC Output / Smart Generator" Port Charging Temperature Charging Temperature Discharging Temperature Discharging Temperature Cap²°C to 60°C (−13°F to 140°F), derating>40°C (104°F) Storage Temperature Cap²°C to 70°C (−13°F to 158°F) Operating Humidity Humidity 0%-95% RH (non-condensing) Akitude ≤2,000 m (6,562 ft) Compliance Safety UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 60335-2-29, AS/NZS 60335.1, IEC/EN 60335-1, IEC/EN 60335-	Discharge	40-57.6V-100A Max per port, total 181A Max
#BATTERY 3 / Smart Generator" Port Charge via the "48V DC Output / Smart Generator" Port Environment Charging Temperature Discharging Temperature -25°C to 60°C (−13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 60°C (−13°F to 140°F), derating>40°C (104°F) Storage Temperature Operating Humidity Altitude ≤2,000 m (6,562 ft) Compliance Safety UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-6-4 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533		
#48V DC Output / Smart Generator" Port Environment Charging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity 0%-95% RH (non-condensing) Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533	"BATTERY 3 / Smart	40-57.6V100A Max
Charging Temperature -25°C to 60°C (−13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 60°C (−13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (−13°F to 158°F) Operating Humidity 0%-95% RH (non-condensing) Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-6-4 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533	"48V DC Output / Smart	40-57.6V70A Max
Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Discharging Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533	Environment	
Temperature -25°C to 60°C (-13°F to 140°F), derating>40°C (104°F) Storage Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533		-25°C to 60°C (-13°F to 140°F), derating>40°C (104°F)
Temperature -25°C to 70°C (-13°F to 158°F) Operating Humidity Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533		-25°C to 60°C (-13°F to 140°F), derating>40°C (104°F)
Humidity Altitude ≤2,000 m (6,562 ft) Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 EMC&RF EMC&RF EMC&RF		–25°C to 70°C (–13°F to 158°F)
Compliance UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335- 1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533		0%-95% RH (non-condensing)
UL1012, UL1778, UL458, CSA C22.2 NO. 107.1, CSA C22.2 NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335- 1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533	Altitude	≤2,000 m (6,562 ft)
Safety NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335- 1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29, AS/NZS 62040.1 EN IEC 61000-6-2 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 EMC&RF ECE R10.06 IEC 60533	Compliance	
EN IEC 61000-6-4 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 EMC&RF ECE R10.06 IEC 60533	Safety	NO. 107.3, IEC/EN 62368-1, IEC/EN 62040-1, IEC/EN 60335-1, IEC/EN 60335-2-29, AS/NZS 60335.1, AS/NZS 60335.2.29,
	EMC&RF	EN IEC 61000-6-4 EN IEC 61000-3-11 EN IEC 61000-3-12 EN 301489-1 EN 301489-17 ECE R10.06 IEC 60533

	FCC Part 15 Subpart C ICES-003 ISED RSS-247
RoHS	EN IEC 63000:2018
Communication	
Communication Method	Wi-Fi (2.4G, 5G), Bluetooth
Other	
IP Rating	IP20

Power Restrictions for Charging and Discharging

• Input source

The upper limits of the charging power depend on the power rating for the input source and the upper limits of the input current configured for the device.

 LFP battery temperature
 The charging current of the LFP battery will drop when the temperature of the LFP battery is too high or too low. The details are as follows:

Temperature	0°C <t ≤10°C</t 	10°C <t ≤15°C</t 	15°C <t ≤45°C</t 	45°C <t ≤50°C</t 	
BP2000: Max continuous charging current (40A)	10A	20A	32A	20A	
1C=40Ah	0.25C	0.5C	0.8C	0.5C	
Temperature	0°C <t ≤5°C</t 	5°C <t ≤10°C</t 	10°C <t ≤20°C</t 	20°C <t ≤40°C</t 	40°C <t ≤50°C</t
BP5000: Max continuous charging current (80A)	10A	20A	40A	80A	50A
1C=100Ah	0.1C	0.2C	0.4C	0.8C	0.5C

Temperature restrictions
 Power Hub 5kVA derates when the temperature is higher then 40°C (104°F).

Input or Output	Single-port Operating at 60°C (140°F)	Multiple-port Operating at 60°C (140°F)
AC charging or discharging	2000W	2000W
DC OUT 12/24V	60A	30A
ALT IN / PV IN 1	4000W	2000W
ALT IN / PV IN 2/3	1200W per port	600W per port
AC output (bypass)	30A	30A

"48V DC Output / Smart Generator" DC input 65A 55A	
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• LFP battery voltage

Battery Voltage	40V < V < 45V	45V < V <57.6V
Maximum output power	3000W	4000W

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