Retrofit Battery Storage Solution

EcoFlow PowerOcean DC Fit

Innovation empowers easy battery retrofit





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An easy and unique PV-coupled retrofit battery storage solution.

With EcoFlow's unique PV-coupling technology, the PowerOcean DC Fit enables direct connection of the battery to the solar system on the PV side, eliminating the need for an additional storage inverter. This streamlined installation process saves valuable time while maximizing the efficiency of user's existing solar system.

By seamlessly integrating up to 15kWh of battery storage into your home solar system, the PowerOcean DC Fit empowers users to achieve energy self-sufficiency easily and cost-effectively.







PV coupling solution v.s. other solutions

	PV coupling	DC coupling	AC coupling
Batteries directly connect with solar panels	•	\otimes	\otimes
No additional storage inverter	•	•	\otimes
No replacement of the existing solar inverter	•	\otimes	•
No change on the AC wiring	•	•	\otimes
No on-grid permit	•	⊘ *	\otimes



Retrofit simply by connecting battery storage with solar panels

Compared to conventional hybrid inverter and home battery systems, the PowerOcean DC Fit seamlessly integrates battery storage into your existing solar system, eliminating the need for an additional storage inverter. This innovative solution efficiently boosts your energy self-sufficiency without requiring significant modifications to your current solar inverter.

- No storage inverter is needed
- No need to replace the existing solar inverter

Maximize the solar system efficiency with lower investment

Starting at 5kWh per battery pack

Each battery pack has an 800V high voltage battery to independently start both single-phase or three-phase solar inverters.

Expanding to up to 15kWh as needed

Boost your energy self-sufficiency with more flexibility and a lower investment.





Wide compatibility with most solar inverters

Utilising EcoFlow's cutting-edge self-adaptive control algorithm, the PowerOcean DC Fit retrofit battery storage solution smartly mitigates the risk of oscillation between the PV-coupled battery system and the third-party solar inverter*, with up to 15kW PV input bypass power per string.



*Kindly note that the compatibility data presented here originates from EcoFlow's laboratory and the use of this product may be potentially subject to specific compatibility restrictions imposed by third-party inverters.

Setup with fewer changes and simplified steps

Unlike other battery solutions on the market, the PowerOcean DC Fit connects its batteries directly to PV ports. There is no need to replace the existing solar inverter or change the wiring on the AC side. Therefore, the entire system is unparalleled easy to install.

No on-grid permit required

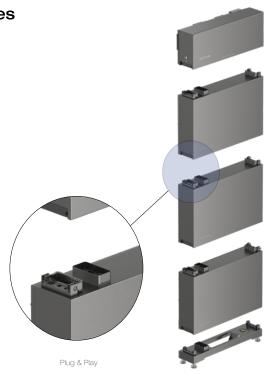
Saving weeks of waiting time for on-grid permit application*

No need to change the AC wires Significantly reducing installation time

Wiring-free battery installation

Stack-up design with click-on battery terminals





More safety, more reliability

Industry-leading PowerOcean LFP battery

EcoFlow PowerOcean DC Fit is designed around the advanced PowerOcean LFP battery, a high-voltage battery system that is parallelly connected and compatible with most solar inverters available out there. Users can enjoy the flexibility to start with a single battery and expand their system at any time. With trusted LFP battery chemistry from CATL and a comprehensive range of active and passive safety measures, we deliver unrivalled battery reliability and performance.

5kWh each pack Expandable up to 15kWh **6,000+*** Life cycles

IP65 Weather proof **LFP**Battery



*6,000+ life cycle till degradation to 70%.

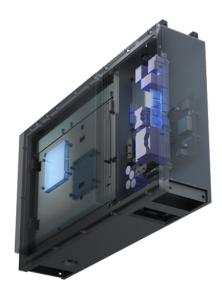
Enhanced safety and reliability

Parallel connection avoid the mutual influence of batteries. The malfunction of one battery doesn't affect the others. And the new battery is perfectly compatible with the old one.

Integrated BMS in every pack, with cloud computing to smartly monitor and prevent risks and improve battery performance.

Fire prevention module in every pack to detect battery temperature and is immediately activated when it's over 170° C.

Auto-heating module automatically activates during cold weather conditions to ensure battery functioning below -20°C.



Smart monitoring on EcoFlow App/Web Portal

The EcoFlow App provides a clean and user-friendly interface for users to view real-time energy data, including power generation, storage and energy bill savings, to help better manage their home energy.





For installers: EcoFlow Pro App/Web Portal

- Ultra-fast 3-step commissioning process
- Comprehensive map view of authorized systems
- Easy troubleshooting
- \cdot Proritize error codes according to the emergency level
- · Know the error code in details





Meet the unique minimalist design

All-in-one minimalist design seamlessly integrates batteries and the storage converter into one system.

Ultra-thin compact size to neatly fit in the basement or garage, saving more space for other appliances.

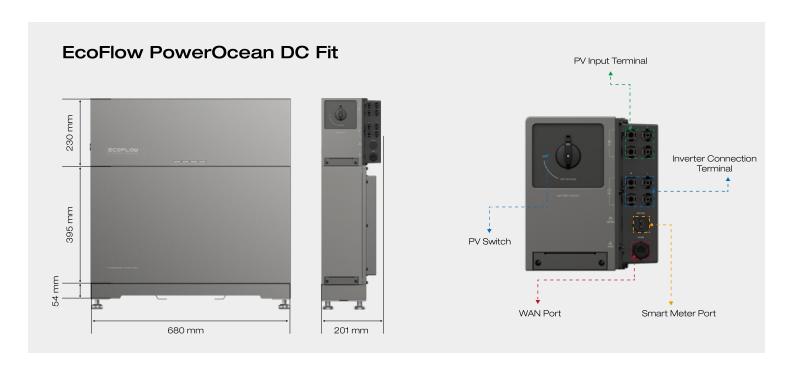
Robust and reliable frosting matte all-metal material.











Technical Parameters

Coupling Method

Coupling method	PV coupling
Input (PV)	
Maximum PV input charing power	5kW (2.5kW * 2)
Maximum PV input bypass power per string	15kW
Maximum input voltage	1000V d.c.
Operating voltage range	150V~800V d.c.
Starting voltage	150V
Maximum PV current per string	20A
Maximum operating current per string	12A
Number of PV strings	2

Output

Supported solar inverter type	Single phase / Three phase
Output voltage range	150V~800V d.c.
Maximum discharging output power to inverter	5kW (2.5kW * 2)
Maximum output current	20A
Output current per string	12A

Battery

Battery material	LFP
Nominal voltage	800V
Operating voltage range	720V~960V
Output voltage of the battery pack	800V
Capacity of each battery pack	5.1kWh
Maximum charging power	2.5kW
Maximum discharging power	3.3kW
Cooling method	Natural convection

Protection

Direct current insulation resistance testing	✓
Input reverse polarity protection	✓
Direct current switch	✓
Overcurrent protection	✓
Overvoltage/Undervoltage protection	✓
Low/High temperature protection	✓

Other Specifications

Operating temperature range	-20°C~50°C
Operating humidity	0~100% RH
Maximum operating altitude	3000m
Converter weight	20kg
Converter dimensions(W*D*H)	680mm*201mm*230mm (±1mm)
1 battery pack weight (with base)	59.2kg
1 battery pack dimensions (with base) (W*D*H)	680mm*183mm*451mm (±1mm)
2 battery packs weight (with base)	114.5kg
2 battery packs dimensions (with base) (W*D*H)	680mm*183mm*847mm (±1mm)
3 battery packs weight (with base)	169.8kg
3 battery packs dimensions (with base) (W*D*H)	680mm*183mm*1244mn (±1mm)
Protection level	IP65
Communication method	RS485, Wi-Fi, WAN, Bluetooth
Noise level	≤35dB
Compliance	

IEC/EN62109-1
IEC/EN62619,
IEC/EN62040-1,
IEC/EN62477-1,
ISO13849

Protective class