

A photograph of a modern, single-story house with large glass windows and a wooden exterior. Inside, a family is sitting on a sofa. Outside, an EcoFlow Ocean 2 battery unit is visible, illuminated by warm lights. The sky is a deep blue, suggesting dusk or dawn.

ECOFLOW

Home Solar Battery Solution

The Next Level All-in-One
EcoFlow OCEAN 2
Three-Phase

5/6/8/10/12/15 kW



One Power All

EcoFlow OCEAN 2 Three-Phase

EcoFlow's three-phase home energy system. Built on the all-new OCEAN 2 LFP battery packs OCEAN 2 delivers higher system performance, smarter whole-home energy control, and faster, more reliable installation.

And it's designed to stay compatible with EcoFlow's previous-generation series—making upgrades and expansions simpler across projects.





Key Highlights

Second-Generation Three-Phase Solar + Storage System

**All-in-one
System Design**

All-New OCEAN 2 LFP Battery Packs

**10,000+
Cell Cycles**

Flexible PV Design

**3 Independent
MPPTs**

True Whole-Home Backup, Built In

**0 ms
Switchover**

Ready for What's Next

**V2X
-Ready**

Inverter and Battery Pack

**Cross-
Generation
Compatible**

Built for every scenario. Perfect your complete energy journey.

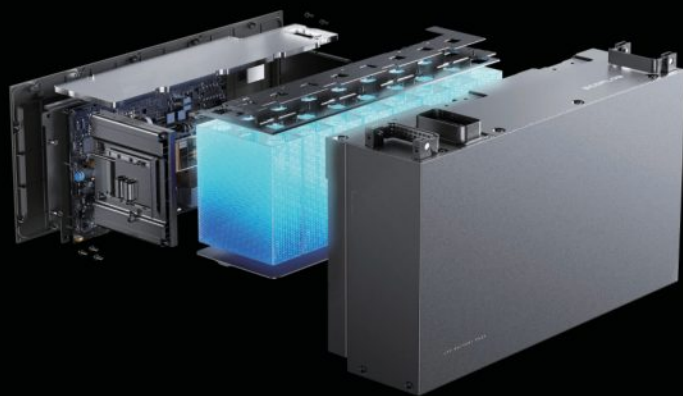


Generation

Optimised Solar Harvest. Tailored for Complex Rooftop Layouts

Up to 24kW PV Input | 120V Low Start-up Voltage

With a 120V low start-up voltage, OCEAN 2 begins generating earlier. Supporting up to 24kW PV input and three independent MPPTs, it enables flexible PV layouts for complex rooftops—maximising roof utilisation and solar yield.



PoweOcean LFP Battery

LFP Performance, Beautifully Powered

5 kWh/8 kWh
Up to 96kWh per system

10,000+
Cell Cycles Life

0.8C^{*2}
Maximum Discharging Power

200%^{*2}
Peak Discharge Power

15 Years^{*1}
Official Warranty

^{*1} 10-Year compulsory warranty and a 5-year optional extended warranty for the OCEAN 2.8kWh LFP Battery.

^{*2} For more details, please refer to the parameter table.

Storage

All-Round Safety, Long-Term Peace of Mind

6 Layers Passive Protection

- Aerogel thermal insulation
- FPC short-circuit protection
- Thermal and fire-resistant insulation
- Built-in fire prevention module
- Explosion-proof pressure relief valve
- Full die-cast aluminum alloy enclosure

4 Layers Active Protection

- NTC temperature monitoring
- AFE chip built into the BMS
- Multi-MOS Active Balancing
- Cloud-based BMS early warning system







Power

Stable Power Delivery. Optimised for Efficiency

6.4kW Battery Discharge Power
100% Unbalanced Load Support

With up to 6.4 kW of discharge power per 8 kWh battery, OCCEAN 2 can power more appliances simultaneously within the same battery capacity. Supporting 100% unbalanced loads, short-term household overloads, and the instantaneous startup of high-power appliances, it maintains stable three-phase output even under demanding conditions.

Meet the 15~30 mins window of high electricity prices, self use or sell electricity at high power during these times. OCEAN 2 LFP Battery 8kWh supports higher power discharge and can participate in grid frequency regulation services.

* Figures are based on internal testing and typical household usage scenarios. Actual results may vary.



Backup

True Whole-Home Backup You Can Rely On

Integrated Whole-home Backup (63A Bypass)
0ms Load-Side Switching
200% Peak Discharge Power

With 63A whole-home backup, 0ms switchover, OCEAN 2 restores power instantly—no extra backup box, no complex rewiring.

Equipped with 200% peak discharge power, it easily absorbs startup surges from air conditioners, motors, and other high-power devices, ensuring uninterrupted performance even during peak demand.

The system also supports third-party inverters and ATS-enabled generators for reliable backup through extended outages.

Pre-Integrated Design. Simpler from Start to Finish.

From unpacking to commissioning, OCEAN 2 eliminates unnecessary components, wiring, and manual adjustments—streamlining on-site workflows and reducing installation errors.



Easy Site Selection

Small Footprint. Big Flexibility.

Designed for diverse installation environments, OCEAN 2 fits tight indoor spaces, outdoor locations, and sites where floor placement isn't ideal.

- Only 196mm battery thick, under 0.13m² footprint
- IP66-rated for outdoor installation
- Up to 480kWh with 5 inverters(on-grid)
- Up to 6 stackable batteries(Floor-mounted) / 3 stackable batteries(Wall-mounted)*

* If install more than 4 battery packs one stack, please verify compliance with local regulations and if the current firmware version support 6 battery packs in one stack.

Easy Handling

Easier to Carry. Easier to Position.

With a lightweight, installer-friendly design, OCEAN 2 simplifies on-site handling.

- 46kg (5kWh LFP Battery), 67.5kg (8kWh LFP Battery)
- Built-in handles for secure grip and safer lifting

Easy Installation

Wiring Time Saved, Step by Step



20+ min saved

Clean, stackable design



60+ min saved

Integrated whole-home backup



50+ min saved

Built-in smart meter



3 min only

Fast commissioning via EcoFlow Pro App

80% Troubleshooting Accuracy. Worry-Free Maintenance

OCEAN 2 continuously monitors system performance through a cloud-based BMS and automatically optimises SOC strategies. Early alerts enable proactive intervention, while remote troubleshooting significantly reduces on-site visits.

Remote

Troubleshooting

Cloud BMS

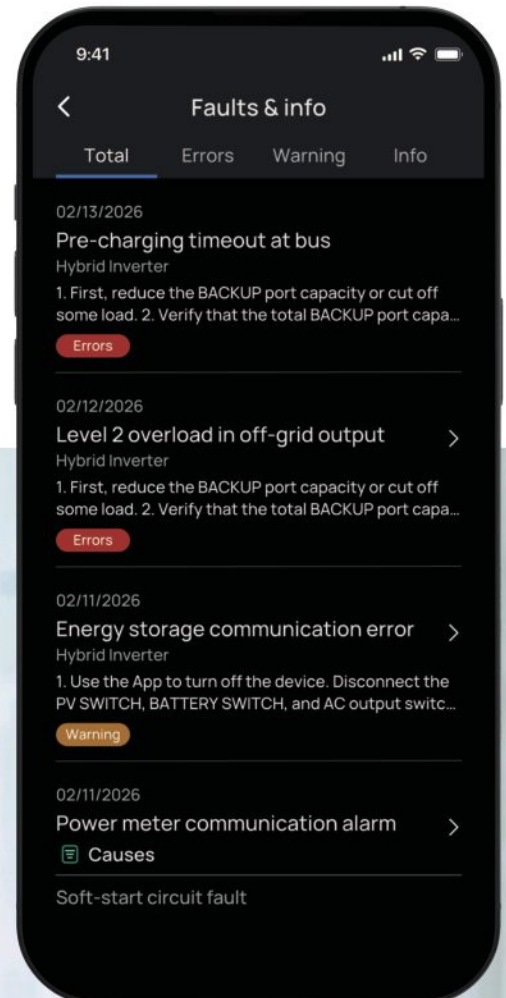
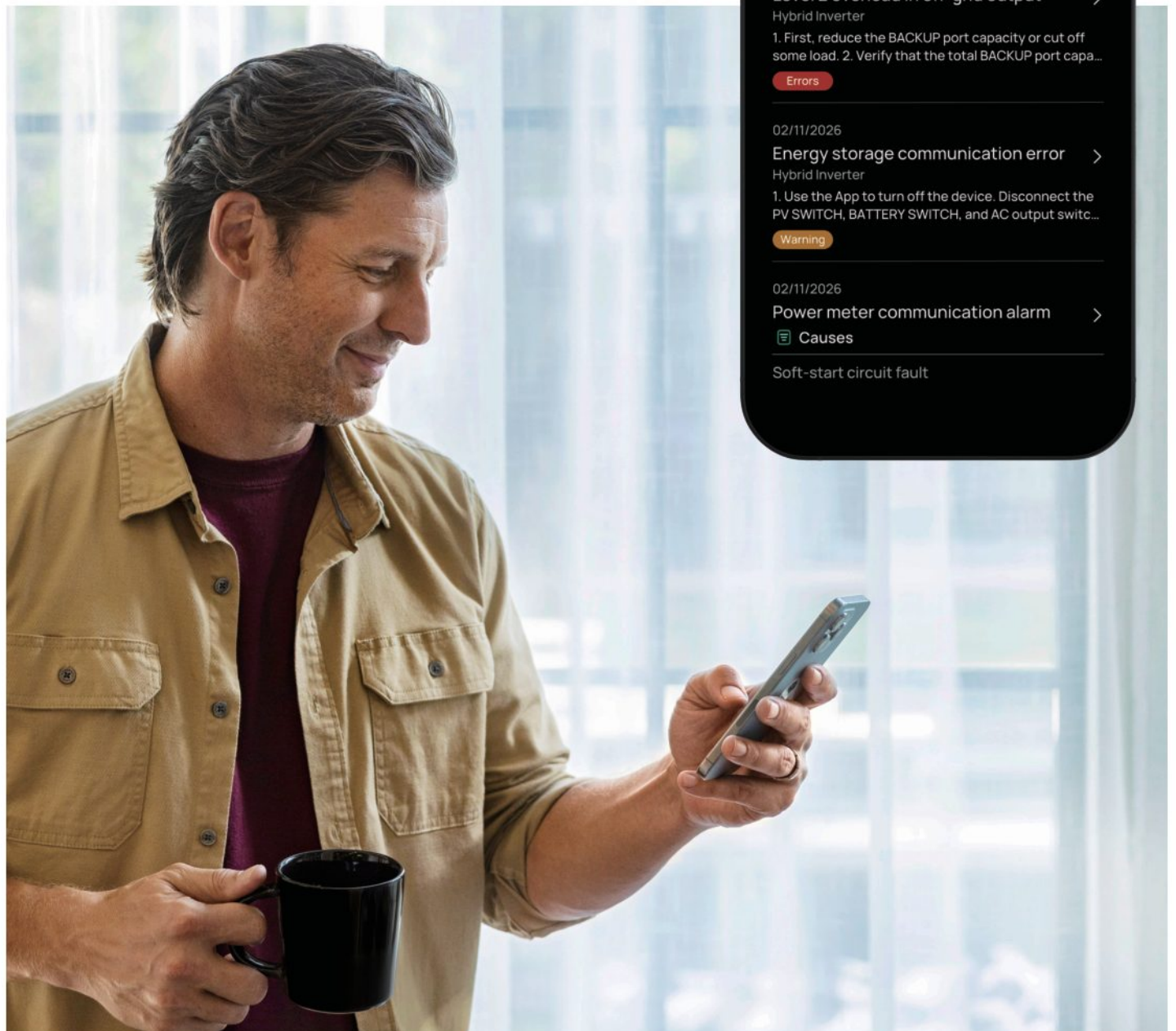
Monitoring & early warning

Automatic SOC

Calibration & balancing

AFCI

Fault detection and shutdown



One Ecosystem. Seamless Whole-Home Integration.

1 Energy Brain | X EcoFlow Products | N Smart Platform Integrations

With OCEAN 2 at the core, solar generation, storage, consumption, backup, and future energy extensions are unified into one intelligent energy platform. All components are managed through one-tap app control, enabling smarter optimisation, simpler operation, and scalable system growth—without added complexity.



ecobee

tapo



Shelly



Cloud API

Modbus

Save Up to 77.6% with Intelligent HEMS

Powered by EcoFlow HEMS, OCEAN 2 automatically optimises solar generation, storage, energy use, and grid interaction based on each home's unique energy profile.





Quality & Reliability

Built to Withstand Harsh Conditions, Year After Year

Engineered for demanding environments, the bottom battery pack features IP66 protection with 72-hour* water-immersion tolerance.

OCEAN 2 three-phase operates reliably across extreme temperatures from -20°C to 55°C , delivering consistent performance in all conditions.

**Applies to the bottom battery module under specified test conditions.

Safety

Ten Layers of Battery Protection, From Component to System

Designed with safety at its core, OCEAN 2 three-phase protects critical points across the entire energy path. Continuous real-time monitoring helps prevent overheating, short circuits, and fire risks. Early detection stops faults from escalating—delivering stable, secure energy storage for years.

EcoFlow OCEAN 2 Hybrid Inverter Three-Phase

Technical parameters		EF HD-P3-5K0-S2 EF HD-P3-5K0-S2F	EF HD-P3-6K0-S2 EF HD-P3-6K0-S2F	EF HD-P3-8K0-S2 EF HD-P3-8K0-S2F	EF HD-P3-10K0-S2 EF HD-P3-10K0-S2F	EF HD-P3-12K0-S2 EF HD-P3-12K0-S2F	EF HD-P3-15K-G2 EF HD-P3-15K-G2F
PV Input	Number of MPPTs	3					
	Number of Strings per MPPT	1					
	Max. Input Power per MPPT(W)	8000					
	Max. Input Voltage ¹ (V)	1000					
	PV Operating Voltage Range(V)	50~1000					
	Nominal DC Input Voltage(V)	600					
	MPPT Start-up Voltage(V)	120					
	Max. Total Input Power(W)	10000	12000	16000	20000	24000	24000
	Max. Input Current per MPPT(A)	16					
	Max. Short Circuit Current per MPPT(A)	20					
AC Input/Output (On-Grid)	Nominal Output Power(W)	5000	6000	8000	10000	12000	15000
	Max. Output Apparent Power(VA)	5000	6600	8800	11000	13200	15000
	Supported Power Grid Types	Supports TN-S,TN-C,TN-C-S,TT systems					
	Nominal Voltage(V)	L-L:380/400Vac; L-N:220/230Vac; 3L+N+PE					
	Nominal Frequency(Hz)	50/60Hz					
	Nominal Output Current	7.2A@230V; 7.6A@220V	8.7A@230V; 9.1A@220V	11.6A@230V; 12.2A@220V	14.5A@230V; 15.2A@220V	17.4A@230V; 18.2A@220V	21.7A@230V; 22.7A@220V
	Max. Output Current(A)	8.9	10.7	14.3	17.8	21.4	25
	Max. Input Current(A)	63					
	Power Factor	0.8 leading ~ 0.8 lagging					
	THDi at Full Load	Current Total Harmonic Distortion ≤3%					
AC Output (Backup)	Nominal Output Power(W)	5000	6000	8000	10000	12000	15000
	Nominal Output Voltage(V)	L-L:380/400Vac; L-N:220/230Vac; 3L+N+PE					
	Nominal Output Frequency(Hz)	50/60Hz					
	Nominal Output Current	7.2A@230V; 7.6A@220V	8.7A@230V; 9.1A@220V	11.6A@230V; 12.2A@220V	14.5A@230V; 15.2A@220V	17.4A@230V; 18.2A@220V	21.7A@230V; 22.7A@220V
	Off-grid THDu	≤2%					
Parallel Installation	Maximum on-grid capacity ²	Up to 5 cascaded inverters					
	Maximum off-grid capacity	Up to 2 cascaded inverters					
Battery Input/ Output	Rated Voltage(V)	800					
	Voltage Range(V)	720~960					
	Battery Capacity	Up to 12 Battery Modules					
	Communication method	CAN					
Efficiency	Max. efficiency	≤97.9%	≤98%				

Protection	Grid-to-Off-grid Switching Time ³ (ms)	0
	Off-grid-to-Grid Switching Time ³ (ms)	0
	GFCI	Yes
	AFCI	Yes
	PV Insulation Resistance Detection	Yes
	Anti-islanding Protection	Yes
	PV Reverse Polarity Protection	Yes
	Emergency Power Off (EPO)	Yes
	DC Surge Protection	Type II
	AC Surge Protection	Type II
	AC Overcurrent Protection	Yes
	AC Short Circuit Protection	Yes
	AC Overvoltage Protection	Yes
General	Relative Humidity	0% ~ 100%
	Operating Temperature Range	-20°C~60°C
	Storage Temperature(°C)	-30°C~60°C
	Operating Altitude(m)	3000, >2000 derating
	Ingress Protection Rating	IP66
	Communication Method	Bluetooth, WiFi, RS485, CAN, WAN
	User Interface	LED&APP
	Weight(kg)	Approx. 36.5
	Dimension (W×D×H) (mm)	680×203×406.5
	Environmental Category	Outdoor/Indoor
	Mounting Method ⁴	Floor Stand/Wall Mounted
Compliance	Anti-theft	Supported
	Compliance	IEC/EN 62109-1, IEC/EN 62109-2, AS 60947.3, ISO 4892-4 EN 300 328, EN 301 893, EN 301 489-1, EN 301 489-17 V3.3.1, EN IEC 61000-6-1, EN IEC 61000-6-2, EN IEC 61000-6-3, EN IEC 61000-6-4, EN IEC 61000-3-11, EN 61000-3-12, EN 55011, EN 62920, EN IEC 62311, EN 50665 VDE-AR-N 4105, EN 50549-1, EN 50549-10, AS/NZS 4777.2, OVE-Richtlinie R, TOR Erzeuger (for Type A), PTPIREE (Type A), PPDS, CEI 0-21, G98, G99, G100, G98 Ni, G99 Ni, TR3.3.1 UNE 217001, UNE 217002, IEC 62116, NTS (Type A), C10/C11, SI 4777.2

1. PV input voltage should not exceed the specified maximum value. Exceeding this limit may trigger system protection or affect normal operation.

2. In grid-connected parallel operation, load-side current is limited by the maximum input current rating of the grid port.

3. The 0 ms transfer time applies under the following conditions: compliance with local grid regulations, in the open-circuit state of the power grid, total load power does not exceed the rated output backup power, stable grid conditions.

4. Maximum 3 battery packs supported for wall-mounted installation.

EcoFlow OCEAN 2 LFP Battery

Technical parameters		EF OCEAN 2 LFP Battery 5kWh (EF BD-5-S2)	EF OCEAN 2 LFP Battery 8kWh (EF BD-8-S2)
Performance	Battery Nominal Capacity ¹ (kWh)	5.02	8.03
	Battery Usable Capacity ¹ (kWh)	4.87	7.76
	Battery Cell Type	LiFePO4	LiFePO4
	Nominal Charging Power(kW)	2.5	4.1
	Nominal Discharging Power(kW)	3.4	4.1
	Maximum Discharging Power ² (kW)	4.08	6.4
	Nominal Voltage(V)	400 / 800	400 / 800
	Operating Voltage Range(V)	360-520 / 720-960	360-520 / 720-960
General	Dimension(WxDxH)(mm)	680 × 196 × 279	680 × 196 × 378
	Weight(kg)	46	67.5
	Installation	Floor Stand: A stack of up to 6 batteries Wall Mounted: A stack of up to 3 batteries	
	Operating Temperature ³ (°C)	-20~55	-20~55
	Storage Temperature(°C)	-25~60	-25~60
	Max. Operating Altitude ⁴ (m)	3000	3000
	Relative Humidity	0% ~100%	0% ~100%
	Cooling Method	Natural Cooling	Intelligent Air Cooling
	Ingress Protection Rating	IP66	IP66
	Communication method	CAN	CAN
	Protection	Over-charge/over-discharge protection, over-voltage/ under-voltage protection, over-current protection, short-circuit protection, reverse-polarity protection, temperature protection, thermal-runaway protection, leakage-current protection, insulation protection, over-pressure protection, automatic power-off protection, emergency shutdown	Over-charge/over-discharge protection, over-voltage/ under-voltage protection, over-current protection, short-circuit protection, reverse-polarity protection, temperature protection, thermal-runaway protection, leakage-current protection, insulation protection, over-pressure protection, automatic power-off protection, emergency shutdown, water ingress detection
Compliance		IEC/EN 62619, IEC/EN 62040-1, IEC/EN 62477-1, ISO 13849-1, VDE-AR-E 2510-50, EN IEC 61000-6-1, EN IEC 61000-6-2, EN IEC 61000-6-3, EN IEC 61000-6-4, UN 38.3	IEC/EN 62619, IEC/EN 62040-1, IEC/EN 62477-1, ISO 13849-1, VDE-AR-E 2510-50, EN IEC 61000-6-1, EN IEC 61000-6-2, EN IEC 61000-6-3, EN IEC 61000-6-4, UN 38.3, SA TS 5398

1. Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.
2. Measured under laboratory conditions at 25°C ambient and device temperature with OCEAN 2 Hybrid Inverter Three-Phase. Values are based on the maximum discharge power of the respective battery model. Actual performance may vary.
3. Power may be derated when the temperature exceeds 40°C.
4. Power may be derated above 2000 m.

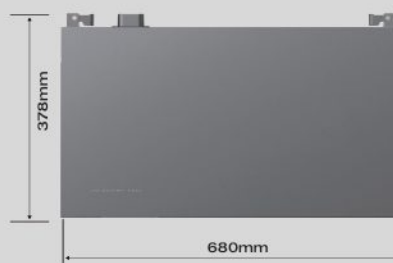
EcoFlow OCEAN 2 Hybrid Inverter



EcoFlow OCEAN 2 LFP Battery 5kWh



EcoFlow OCEAN 2 LFP Battery 8kWh



Accessories

EcoFlow PowerInsight 2 Monitor

11-inch HD display tracks power flow and unifies smart home control.

Matter 1.4 compatible with Google Nest & major brands for effortless connected living.



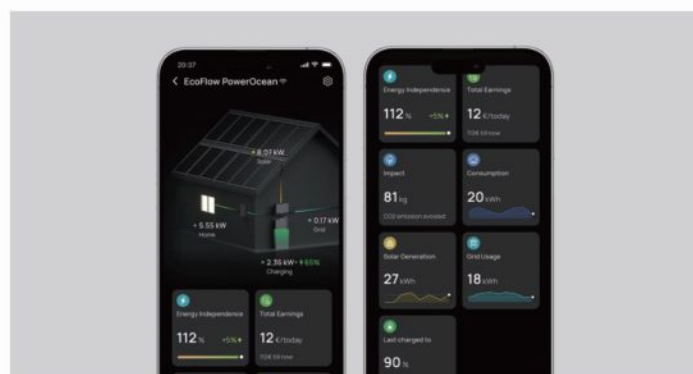
EcoFlow App and Web Portal

EcoFlow App and Web Portal For End Users

The EcoFlow app provides a simple, unified way to manage your EcoFlow products. Whether you're monitoring your home energy ecosystem or controlling EcoFlow portable power stations, everything is brought together in one intuitive platform—giving you personalised energy insights, control, and device management.



Scan the QR Code to Download



EcoFlow Pro App and Web Portal for Installers

Instant Setup

Complete installation with a fast, three-step commissioning process.

Mobile Control

Monitor and manage authorised systems directly from your smartphone.

On-the-Go Troubleshooting

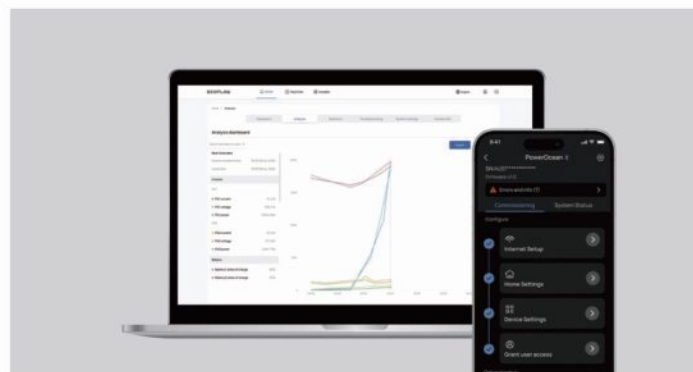
Identify and resolve issues faster with real-time error code alerts.

Detailed Diagnostics

Access in-depth error code details for precise troubleshooting and maintenance.



Scan the QR Code to Download



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