

# EcoFlow PowerOcean (Single-Phase)

## Solar Battery Storage Solution

EcoFlow PowerOcean (Single-Phase) redefines home energy storage with advanced safety, LFP battery technology, a fire prevention module, and an IP65-certified design. Offering a 15-year warranty, with batteries expandable up to 60kWh through cascading three inverters, EcoFlow PowerOcean is a secure, scalable solution that future proofs your home.



### For installers

EcoFlow Pro Web Portal  
<https://portal.ecoflow.com/pro/au>  
 Mail to  
[solutionsales.au@ecoflow.com](mailto:solutionsales.au@ecoflow.com)



EcoFlow Pro App

### For users

EcoFlow Web Portal  
<https://portal.ecoflow.com/user/au>



EcoFlow App

## EcoFlow PowerOcean LFP Battery

Number of Battery Packs		EF BD-5.1-S1 EF BD-B-S1	EF BD-10.2-S1 EF BD-B-S1	EF BD-15.3-S1 EF BD-B-S1	EF BD-20.4-S1 EF BD-B-S1
Performance	Battery Nominal Capacity (kWh)	5.1	10.2	15.3	20.4
	Battery Usable Capacity (kWh)*2 (100% Depth of Discharge)	5.1	10.2	15.3	20.4
	Max. Discharge Power (W)	3300	6600	9900	13200
	Max. Charge Power (W)	2500	5000	7500	10000
	Nominal Voltage (V)	800			
	Operating Voltage Range (V)	720-960			
	Battery Short Circuit current (A)	200A for 300 us	400A for 300 us	600A for 300 us	800A for 300 us
	Battery Maximum Discharge Current (A)	4.4	8.8	13.2	17.6
	Battery Maximum Charge Current (A)	3.3	6.6	9.9	13.2
	Rated DC Power (kW)	Discharge: 3.3 Charge: 2.5	Discharge: 6.6 Charge: 5.0	Discharge: 9.9 Charge: 7.5	Discharge: 13.2 Charge: 10
Battery Cell Type	LiFePO4				
Compliance	Certificates	RCM MARK			
	Safety Standard	IEC 62619, IEC 62040-1, IEC 62477-1, ISO13849			
	Delivery Standard	UN38.3			
	EMC	IEC 61000-6-1/3			
General	Dimension (mm) (inverter-included)	680×183×732 (±1)	680×183×1129 (±1)	680×183×1525 (±1)	680×183×1920 (±1)
		680×183×424 (±1) (EF BD-5.1-S1 x 1)			
	Weight (kg) (inverter-included)	80.7	136.2	191.7	247.2
		55.5 (EF BD-5.1-S1 x 1)			
	Installation	Floor Stand/Wall Mounting			
	Operating Temperature (°C)	-20 to 50			
	Max. Operating Altitude (m)	3000			
	Communication Method	CAN			
	Cooling Method	Natural Convection			
	Noise Emission (dB)	≤35*1			
Relative Humidity	0%-100% (Condensing)				
Active Aerosol Fire Prevention Module	Integrated				
Protection Level	IP65				
Protective Class	I				

\*2 To maintain optimal battery performance in low-temperature environments, the depth of discharge (DoD) may vary with actual temperature. This is a normal fluctuation.

# EcoFlow PowerOcean Hybrid Inverter

Technical parameters		EF HD-P1-3K-S1-A	EF HD-P1-5K-S1-A	EF HD-P1-6K-S1-A
DC Input (PV)	Maximum PV Power (kW)	9	11	12
	Maximum Input Voltage (V)	600		
	Mppt Voltage Range (V)	90V-520		
	Maximum Input Current per MPPT (A)	18 (single PV input), 16 (dual PV input)		
	Maximum Short Circuit Current per MPPT (A)	20		
	Backfeed Current to the PV Array (A)	0		
	Number of MPPTs	2		
	Overvoltage Category	II		
DC Input (Battery)	Rated Voltage (V)	790		
	Maximum Voltage (V)	800		
	Rated Current (A)	7.6		
	Maximum Current (A)	7.6	7.6	8.4
	Maximum Battery Capacity (kWh)	20.4		
AC Input	Grid Connection	L+N+PE		
	Overvoltage Category	III		
	Rated Input Power (W)	3000	5000	6000
	Maximum Apparent Power (VA)	3000	5000	6000
	Rated Input Voltage (V)	220/230/240, L+N+PE		
	Maximum Input Current (A)	16	26.7	32
	Nominal Frequency (Hz)	50/60		
AC Output (On-grid)	Grid Connection	L+N+PE		
	Overvoltage Category	III		
	Rated Output Power (W)	3000	5000	6000
	Maximum Apparent Power (VA)	3000	5000	6000
	Rated Output Voltage (V)	220/230/240, L+N+PE		
	Rated Output Current (A)	13.1	21.7	26.1
	Maximum Output Current (A)	15	25	30
	Nominal Frequency (Hz)	50/60		
	Total Harmonic Distortion (At Rated Power)	≤5%	≤3%	≤3%
Power Factor	-0.8...1...+0.8			
AC Output (Backup load)	Maximum Output Power (VA)	3000	5000	6000
	Nominal Output Voltage (V)	220/230/240, L+N+PE		
	Nominal Frequency (Hz)	50/60		
	Maximum Output Current (A)	16	26.7	32
	Rated Output Current (A)	13.1	21.7	26.1
Efficiency	Maximum Efficiency	>96%	>96.5%	>96.5%
	European Weighted Efficiency	>95%	>96%	>96%
Protection	GFCI	Integrated		
	AFCI	Integrated		
	Insulation Resistance Detection	Integrated		
	PV Reverse Polarity Protection	Integrated		
	AC Overcurrent Protection	Integrated		
	AC Short-Circuit Protection	Integrated		
	AC Overvoltage Protection	Integrated		
	Protective Class	I		
Compliance	Certificates	RCM MARK		
	Safety Standard	IEC/EN62109-1, IEC/EN62109-2		
	Grid-Tied Standards	G98, G99, G100, VDE-AR-N 4105, CEI 0-21, UTE C15-712-1, VDE 0126-1-1, EN 50549-1, C10/11, NTS631, UNE 217001, UNE 217002, PPDS, PTPIREE, PSE, NC RfG, ORDINANCE No.140, NRS 097-2-1, AS/NZS 4777.2		
	EMC	EN/IEC 61000-6-1/2/3/4, IEC 61000-4-16/18/29, IEC 61000-2-2, EN 300328, EN 301489-1, EN 301489-17, EN IEC 62311		
General	Cascading	Up to 60kWh battery capacity*3		
	Topology	Non-isolated		
	Ingress Protection Rating	IP65		
	Operating Temperature Range (°C)	-20 to 50 (derating when the temperature is above 40 or below 0)		
	Storage Temperature Range (°C)	-30 to 60		
	Operating Humidity	0%-100% (Condensing)		
	Maximum Operating Altitude (m)	3000 (derating above 2000)		
	Weight (kg)	21.5		
	Dimensions (WxDxH) (mm)	679.6×182.7×280 (without IOT & Wi-Fi module)		
	Noise Emission (dB)	40*1		
	Self-Consumption at Night (W)	<30		
	Cooling Method	Natural convection		
	Communication Method	RS485 & CAN & Wi-Fi & Bluetooth & WAN & 4G		
	Wi-Fi Frequency Range, Maximum Output Power	2400 MHz-2483.5 MHz, 17 dBm		
	Bluetooth Frequency Range, Maximum Output Power	2400 MHz-2483.5 MHz, 8 dBm		
	Pollution Degree	PD3		
Environmental Category	Outdoor/Indoor			
Country of Manufacture	China			

\*1 Noise emission value measured under laboratory conditions: ambient temperature 25°C, free-field acoustic environment, measurement position 1m directly in front of the equipment. Actual noise levels may vary depending on load conditions, installation methods and environmental reflection characteristics. This data is only applicable to the declared test conditions.

\*2 For a total battery capacity of 60kWh, 3 hybrid inverters are required. One hybrid inverter can support a maximum of 20kWh.

Please be advised that EcoFlow reserves the right to modify the design, components, and specifications of its products at any time without prior notice or obligation. The actual product details and final design may vary from those shown or described in this brochure.