DATASHEET

ECOFLOW

EcoFlow PowerOcean (Three-Phase)

Solar Battery Storage Solution

EcoFlow PowerOcean (Three-Phase) is a premium, modular 3-phase home solar-battery system starting from 5 kWh and expandable at any time. It offers flexible upfront investment, advanced multi-layer safety protection, integrated backup, and intelligent energy management. Backed by a 15-year warranty, PowerOcean is engineered to deliver reliable, long-term energy independence for the entire household.

For installers

EcoFlow Pro Web Portal
https://portal.ecoflow.com/pro/au
Mail to
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-JC-S1 EF BD-5.1-S1 EF BD-B-S1	EF BD-JC-S1 EF BD-10.2-S1 EF BD-B-S1	EF BD-JC-S1 EF BD-15.3-S1 EF BD-B-S1	EF BD-JC-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 (100% Depth of Discharge)*2 (kWh)	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 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)	680×183×612 (±1)	680×183×1009 (±1)	680×183×1406 (±1)	680×183×1803 (±1)
		680×183×424 (±1) (EF BD-5.1-S1 x 1)			
	Weight (kg)	65.6	120.9	176.2	231.5
		55.5 (EF BD-5.1-S1 x 1)			
	Installation	Floor stand / wall mounted			
	Operating Temperature (°C)	-20 to 50			
	Max. Operating Altitude (m)	3000			
	Cooling Method	Natural convection			
	Noise Level (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-P3-6K0-S1	EF HD-P3-8K0-S1	EF HD-P3-10K-S1	EF HD-P3-12K-S1
DC Input (PV)	Maximum PV Power (W)	10000	12000	14000	16000
	Maximum Input Voltage (V)	1000			
	MPPT Operating Voltage Range (V)	200-850			
	Start-Up Voltage (V)	160			
	Nominal Input Voltage (V)	600			
	Maximum Power per MPPT (W)	5000	6000	7000	8000
	Maximum Input Current per MPPT (A)	16			
	Maximum Short Circuit Current per MPPT (A)	24			
	Number of Strings per MPPT	1			
	Number of MPPTs	2			
	Overvoltage Category	II			
DC Input (Battery)	Maximum Charging Power (W)	6000	8000	10000	12000
	Maximum Discharging Power (W)	6000	8000	10000	12000
	Maximum Continuous Charging Current (A)	12.5	12.5	12.5	15
	Maximum Continuous Discharging Current (A)	12.5	12.5	12.5	15
	Rated Voltage (V)	800			
	Maximum Battery Capacity (kWh)	45.9			
AC Input	Connection	3L+N+PE			
	Overvoltage Category	III			
	Nominal Apparent Power from Utility Grid (VA)	12000	16000	16000	16000
	Maximum Apparent Power from Utility Grid (VA)	12000	16000	16000	16000
	Rated Input Voltage (V)	230/400, 3L+N+PE			
	Maximum AC Current from Utility Grid (A)	17.4	23.1	23.1	23.1
	Nominal Frequency (Hz)	50/60			
AC Output (On-Grid)	Grid Connection	3L+N+PE			
	Overvoltage Category	III			
	Nominal Apparent Power Output to Utility Grid (VA)	6000	8000	10000	12000
	Maximum Apparent Power Output to Utility Grid (VA)	6000	8000	10000	12000
	Nominal Output Voltage (V)	230/400, 3L+N+PE			
	Nominal Frequency (Hz)	50/60			
	Maximum AC Current Output to Utility Grid (A)	8.7	11.5	14.4	17.4
	Nominal Output Current (A)	8.7	11.5	14.4	17.4
	Current Total Harmonic Distortion (At Rated Power)	<3%			
	Power Factor	-0.8...1...+0.8			
AC Output (Partial Backup)	Nominal Apparent Power (VA)	6000	8000	10000	12000
	Maximum Apparent Power (VA)	7200 for 1 sec.	9600 for 1 sec.	12000 for 1 sec.	14400 for 1 sec.
	Nominal Output Voltage (V)	230/400, 3L+N+PE			
	Nominal Frequency (Hz)	50/60			
	Nominal Output Current (A)	8.7	11.5	14.4	17.4
	Maximum Output Current (A)	10.4 for 1 sec.	13.9 for 1 sec.	17.4 for 1 sec.	20.9 for 1 sec.
	Voltage Total Harmonic Distortion (At Linear Load & Rated Power)	<3%			
	Residual Current Monitoring	Integrated			
	PV Insulation Resistance Detection	Integrated			
	Anti-Islanding Protection	Integrated			
	PV Reverse Polarity Protection	Integrated			
	AC Overcurrent Protection	Integrated			
	Backup Load Short-Circuit Protection	Integrated			
	AC Overvoltage Protection	Integrated			
	DC Switch	Integrated			
	Remote Shutdown	Integrated			
	Protective Class	I			
Efficiency	Maximum Efficiency	97.6%			
	Maximum MPPT Efficiency	99.9%			
Compliance	Certificates	CE/CB/TUV MARK			CE MARK
	Safety Standards	IEC/EN62109-1, IEC/EN62109-2			
	Grid-tied Standards	EN 50549, EN50438, TOR Erzeuger Type A, EEA-NE7- CH, PTPiREE, UTE C 15-712-1, ANRE, O3E-323, G99, G98,CEI0-21, C10/11, VDE-AR-N-4105, AS 4777.2			
	EMC	EN 62311, EN 301 489-1, EN 301 489-17, EN IEC 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN IEC 61000-6-1, EN 300 328			
General Data	Cascading	Up to 90kWh battery capacity*[3]			
	Topology	Non-isolated			
	Operating Temperature Range (°C)	-20 to 50			
	Storage Temperature (°C)	-30 to 60			
	Operating Relative Humidity	0%-100% (Condensing)			
	Noise Emission (dB)	<35*[1]			
	Maximum Operating Altitude (m)	3000			
	Weight (kg)	Approximately 29.6			
	Dimensions (W×D×H) (mm)	588×175×380 (±1) (without trim cover), 588×175×455 (±1) (with trim cover)			
	Protection Level	IP65			
	Self-Consumption at night (W)	<25			
	Cooling Method	Natural convection			
	Communication Method	RS485 (for Meter) & CAN (for BMS) & Wi-Fi & Bluetooth & WAN & 4G			
	Wi-Fi Frequency Range (MHz) Maximum Output Power (dBm)	2412-2472 (20) / 2422-2462 (40), 18.54			
	Bluetooth Frequency Range (MHz) Maximum Output Power (dBm)	2402-2480, 7.19			
	Pollution Degree	PD3			
	Environmental Category	Outdoor/Indoor			

*[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.
*[3] For a total battery capacity of 90kWh, 2 hybrid inverters are required. One hybrid inverter can support a maximum of 45kWh.

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.