

DATASHEET

EcoFlow PowerOcean Single-phase

Safety and Power Independence in Every Charge

The EcoFlow PowerOcean redefines home energy storage with an advanced safety system, LFP battery tech, active fire protection module, and an IP65-certified design. Expandable up to 15kWh, it offers over 6000 charge cycles and a 15-year warranty— a secure, scalable, and future-proof power investment for your home.



For installers

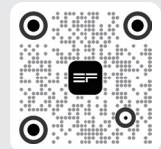


EcoFlow Pro Web Portal

<https://portal.ecoflow.com/pro/eu>

EcoFlow Pro App

For users



EcoFlow Web Portal

<https://portal.ecoflow.com/user/eu>

EcoFlow App

EcoFlow PowerOcean LFP Battery

Number of Battery Packs		EF BD-5.1-S1 x 1 EF BD-B-S1 x 1	EF BD-5.1-S1 x 2 EF BD-B-S1 x 1	EF BD-5.1-S1 x 3 EF BD-B-S1 x 1
Performance	Battery Nominal Capacity (kWh)	5.1	10.2	15.3
	Battery Usable Capacity (kWh) (95% Depth of Discharge)	4.8	9.7	14.5
	Max. Output Power (W)	3300	6600	9900
	Max. Input Power (W)	2500	5000	7500
	Nominal Voltage (V)	800		
	Operating Voltage Range (V)	720-960		
Compliance	Battery Cell Type	LFP		
	Certificates	CB/CE MARK		
	Safety Standard	EN62619, EN62040-1, EN62477-1, ISO13849, VDE-AR-E 2510-50		
	Delivery Standard	UN38.3		
General	EMC	EN 61000-6-1, EN 61000-6-3		
	Dimension (WxDxH) (mm) (Without Adjustable Feet)	680x183x452 (±1)	680x183x849 (±1)	680x183x1245 (±1)
	Weight (kg)	59.2	114.7	170.2
	Installation	Floor stand/Wall Mounting		
	Operating Temperature (°C)	-20 to 50		
	Max. Operating Altitude (m)	3000		
	Cooling Method	Natural Convection		
	Noise Emission (dB)	≤35		
	Relative Humidity	0%-100% (Condensing)		
Protection Level	IP65			
Protective Class	I			

EcoFlow PowerOcean Hybrid Inverter

Technical parameters		EF HD-P1-3K-S1	EF HD-P1-3.68K-S1	EF HD-P1-4.6K-S1	EF HD-P1-5K-S1	EF HD-P1-6K-S1
DC Input (PV)	Maximum PV Power (W)	9000	9680	10600	11000	12000
	Maximum Input Voltage (V)	600V DC				
	Mppt Voltage Range (V)	90V-520V DC				
	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				
DC Input (Battery)	Overvoltage Category	II				
	Rated Voltage (V)	790V DC				
	Maximum Voltage (V)	800V DC				
	Rated Current (A)	7.6				
	Maximum Current (A)	7.6	7.6	7.6	7.6	8.4
AC Input	Maximum Battery Capacity (kWh)	15.3				
	Grid Connection	L+N+PE				
	Overvoltage Category	III				
	Rated Input Power (W)	3000	3680	4600	5000	6000
	Maximum Apparent Power (VA)	3000	3680	4600	5000	6000
	Rated Input Voltage (V)	220V/230V/240V AC, L+N+PE				
	Maximum Input Current (A)	16	19.7	24.6	26.7	32
AC Output (On-grid)	Nominal Frequency (Hz)	50/60				
	Grid Connection	L+N+PE				
	Overvoltage Category	III				
	Rated Output Power (W)	3000	3680	4600	5000	6000
	Maximum Apparent Power (VA)	3000	3680	4600	5000	6000
	Rated Output Voltage (V)	220V/230V/240V AC, L+N+PE				
	Rated Output Current (A)	13.1	16	20	21.7	26.1
	Maximum Output Current (A)	15	18.4	23	25	30
AC Output (Backup load)	Nominal Frequency (Hz)	50/60				
	Grid Connection	L+N+PE				
	Overvoltage Category	III				
	Rated Output Power (W)	3000	3680	4600	5000	6000
	Maximum Apparent Power (VA)	3000	3680	4600	5000	6000
	Rated Output Voltage (V)	220V/230V/240V AC, L+N+PE				
Efficiency	Rated Output Current (A)	13.1	16	20	21.7	26.1
	Maximum Output Current (A)	15	18.4	23	25	30
Efficiency	Nominal Frequency (Hz)	50/60				
	Total Harmonic Distortion (At Rated Power)	≤5%	≤5%	≤3%	≤3%	≤3%
Efficiency	Power Factor	-0.8...1...+0.8				
	Maximum Output Power (VA)	3000	3680	4600	5000	6000
	Nominal Output Voltage (V)	220V/230V/240V AC, L+N+PE				
	Nominal Frequency (Hz)	50/60				
	Maximum Output Current (A)	13.7	16.8	21	22.8	27.3
Efficiency	Rated Output Current (A)	13.1	16	20	21.7	26.1
	Maximum Efficiency	>96%	>96.5%			
Protection	European Weighted Efficiency	>95%	>96%			
	GFCI	Supported				
	Insulation Resistance Detection	Supported				
	Anti-Islanding Protection	Supported				
	PV Reverse Polarity Protection	Supported				
	AC Overcurrent Protection	Supported				
	AC Short-Circuit Protection	Supported				
Compliance	AC Overvoltage Protection	Supported				
	Protective Class	I				
	Certificates	CE/CB/DEKRA MARK				
	Safety Standard	IEC/EN62109-1, IEC/EN62109-2				
Compliance	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, PPDS, PTPIREE, PSE, NC RfG, ORDINANCE No.140, NRS 097-2-1				
	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	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)	679.6x182.7x280 (without IOT&Wi-Fi module)				
	Noise Emission (dB)	40				
	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					

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.