

# EcoFlow PowerOcean (Three-Phase)

## Home Solar Battery Solution

The innovative 3-phase solar battery solution starting from 5kWh, expandable at all times. EcoFlow PowerOcean is a premium 3-phase modular home solar solution. With a flexible upfront investment, outstanding safety features, outage backup and super smart control, PowerOcean is designed to achieve power independence for the whole house.



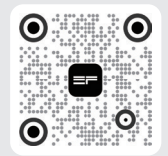
### For installers



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-JC-S2 x 1<br>EF BD-5.1-S1 x 1<br>EF BD-B-S1 x 1     | EF BD-JC-S2 x 1<br>EF BD-5.1-S1 x 2<br>EF BD-B-S1 x 1 | EF BD-JC-S2 x 1<br>EF BD-5.1-S1 x 3<br>EF BD-B-S1 x 1 | EF BD-JC-S2 x 1<br>EF BD-5.1-S1 x 4<br>EF BD-B-S1 x 1 |
|---------------------------|---------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| Performance               | Battery Nominal Capacity (kWh)                          | 5.1                                                       | 10.2                                                  | 15.3                                                  | 20.4                                                  |
|                           | Battery Usable Capacity (95% Depth of Discharge)*2(kWh) | 4.8                                                       | 9.7                                                   | 4.5                                                   | 19.4                                                  |
|                           | Max. Output Power (W)                                   | 3300                                                      | 6600                                                  | 9900                                                  | 13200                                                 |
|                           | Max. Input Power (W)                                    | 2500                                                      | 5000                                                  | 7500                                                  | 10000                                                 |
|                           | Nominal Voltage (V)                                     | 800                                                       |                                                       |                                                       |                                                       |
|                           | Operating Voltage Range (V)                             | 720-960                                                   |                                                       |                                                       |                                                       |
| Compliance                | Battery Cell Type                                       | LFP                                                       |                                                       |                                                       |                                                       |
|                           | Certificates                                            | CE MARK                                                   |                                                       |                                                       |                                                       |
|                           | Safety Standard                                         | EN62619, EN62040-1, EN62477-1, ISO13849, VDE-AR-E-2510-50 |                                                       |                                                       |                                                       |
|                           | Delivery Standard                                       | UN38.3                                                    |                                                       |                                                       |                                                       |
| Performance               | EMC                                                     | EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4    |                                                       |                                                       |                                                       |
|                           | Dimension (WxDxH) (Without Adjustable Feet) (mm)        | 680x183x612 (±1)                                          | 680x183x1009 (±1)                                     | 680x183x1406 (±1)                                     | 680x183x1803(+1)                                      |
|                           | Weight (kg)                                             | 65.6                                                      | 120.9                                                 | 176.2                                                 | 231.5                                                 |
|                           |                                                         | 55.5 (EF BD-5.1-S1 x 1)                                   |                                                       |                                                       |                                                       |
|                           | Installation                                            | Floor stand                                               |                                                       |                                                       |                                                       |
|                           | 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                                                |                                                       |                                                       |                                                       |
| Ingress Protection Rating | IP65                                                    |                                                           |                                                       |                                                       |                                                       |
| Protective Class          | I                                                       |                                                           |                                                       |                                                       |                                                       |

\* 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                                                                                                                                    |                 |                  |                  |
| DC Input (Battery)              | Overvoltage Category                               | II                                                                                                                                   |                 |                  |                  |
|                                 | 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                                                                                                                                  |                 |                  |                  |
| AC Input                        | Maximum Battery Capacity (kWh)                     | 45.9                                                                                                                                 |                 |                  |                  |
|                                 | 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                                                                                                                     |                 |                  |                  |
| AC Output (On-Grid)             | Maximum AC Current from Utility Grid (A)           | 17.4                                                                                                                                 | 23.1            | 23.1             | 23.1             |
|                                 | Nominal Frequency (Hz)                             | 50/60                                                                                                                                |                 |                  |                  |
|                                 | 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            |
| AC Output (Partial Backup)      | 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)                         | 8.7                                                                                                                                  | 11.5            | 14.4             | 17.4             |
|                                 | Current Total Harmonic Distortion (At Rated Power) | <3%                                                                                                                                  |                 |                  |                  |
|                                 | Power Factor                                       | -0.8...1...+0.8                                                                                                                      |                 |                  |                  |
| Protection                      | 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. |
|                                 | Maximum Efficiency                                 | 97.6%                                                                                                                                |                 |                  |                  |
|                                 | Maximum MPPT Efficiency                            | 99.9%                                                                                                                                |                 |                  |                  |
|                                 | Certificates                                       | CE/CB/TUV MARK                                                                                                                       |                 |                  | CE MARK          |
|                                 | Safety Standards                                   | IEC/EN62109-1, IEC/EN62109-2                                                                                                         |                 |                  |                  |
| General Data                    | Grid-tied Standards                                | EN 50549, EN50438, TOR Erzeuger Type A, EEA-NE7- CH, PTPIREE, UTE C 15-712-1, ANRE, O3E-323, G99, G98,CEIO-21, C10/11, VDE-AR-N-4105 |                 |                  |                  |
|                                 | 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                |                 |                  |                  |
|                                 | 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                                                                                                                                  |                 |                  |                  |
|                                 | Maximum Operating Altitude (m)                     | 3000                                                                                                                                 |                 |                  |                  |
|                                 | Weight (kg)                                        | Approximately 29.6                                                                                                                   |                 |                  |                  |
|                                 | Dimensions (WxDxH) (mm)                            | 588x175x380 (±1) (without trim cover),<br>588x175x455 (±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)     | 2412-2472 (20) / 2422-2462 (40),                   |                                                                                                                                      |                 |                  |                  |
| Maximum Output Power (dBm)      | 18.54                                              |                                                                                                                                      |                 |                  |                  |
| Bluetooth Frequency Range (MHz) | 2402-2480,                                         |                                                                                                                                      |                 |                  |                  |
| Maximum Output Power (dBm)      | 7.19                                               |                                                                                                                                      |                 |                  |                  |
| 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.