



# Pwr Box ESS

LFP 125kW / 261kWh

## SAFE

Smart liquid-cooled temperature control maintains battery consistency ( $\leq 2.5^{\circ}\text{C}$ ), extending lifespan by 15%. Proven reliability through extensive destructive testing (short circuits, fire resistance, etc.).

Multi-level electrical protection with advanced BMS, EMS, and thermal backup, Integrated fire safety: early thermal runaway detection, gas/smoke monitoring, and automatic fire suppression.

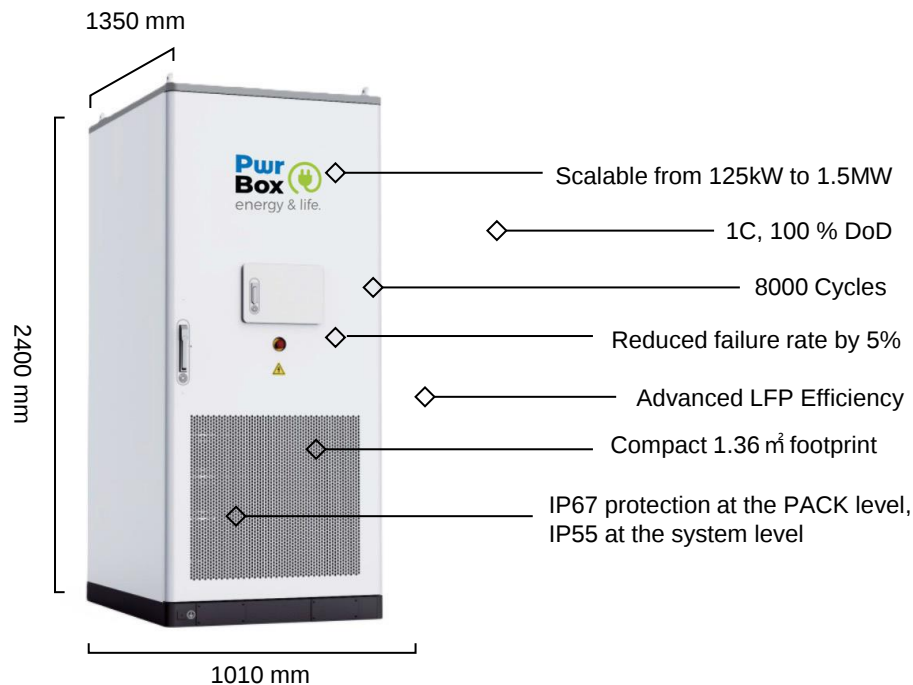
## SMART

Real-time leakage monitoring and automated maintenance minimize on-site work.

Cloud-based remote monitoring and smart AI balancing for battery life optimization.

Black start capability for reliable off-grid and micro-grid operation.

Supports multiple operation modes: VPP, grid-connected, and off-grid, enhancing revenue potential.



**5 YEARS**

Materials and workmanship guarantee

**10 YEARS**

78 % Output Power guarantee

**CYCLES**

8000 Cycles Power guarantee

| Electrical Characteristics       |                        | Mechanical Specifications     |                                                                                                              |
|----------------------------------|------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>DC parameters</b>             |                        | Cooling mode                  | liquid-cooled (PACK), liquid-cooled (PCS)                                                                    |
| Cell Type                        | LFP-3,2V-314Ah         | Fire protection               | Flammable gas detector + Aerosol + Explosion vent panel<br>+ Water fire protection + Acousto-optic alarm     |
| Rated capacity                   | 261,24 kWh             | Anti-corrosive level          | C4                                                                                                           |
| Nominal Voltage                  | 824 V                  | Ingress protection            | IP55                                                                                                         |
| Voltage Range                    | 720 – 936 V            | Operating ambient temperature | -20 – 55 °C                                                                                                  |
| Charge-discharge rate            | < 0,5 CP               | Storage temperature           | -30 – 50 °C                                                                                                  |
| <b>AC parameters (on-grid)</b>   |                        | Storage SOC                   | 30 – 50 % < 6 months                                                                                         |
| Rated power                      | 125 kW                 | Operating humidity            | 0 – 95 % RH                                                                                                  |
| Grid voltage                     | 400 V, 3P              | Self condensation             | No                                                                                                           |
| Rated current                    | 3 x 180 A              | Installation mode             | Indoor / Outdoor                                                                                             |
| Rated frequency                  | 50 Hz (45-55 Hz)       | System communication          | Ethernet, RS485                                                                                              |
| THD                              | <3 %                   | Com protocol                  | Modbus TCP/RTU, MQTT                                                                                         |
| Power factor                     | > 0,99 (rated power)   | Altitude                      | < 2000 m                                                                                                     |
| Power factor range               | - 1 (lead) to +1 (lag) | Dimensions                    | W1400 x D1300 x H2375 mm                                                                                     |
| <b>AC parameters (off-grid)</b>  |                        | Weight                        | 2600 kg                                                                                                      |
| Off-grid voltage                 | 400 V (- 5 % to + 5 %) | Certificate                   | IEC 62619, IEC 60730-1, IEC 63056, IEC 62933-5-2, IEC 61000-6-2/-4, UN38.3, IEC 62477-1, AS4777.2, EN50549-1 |
| Off-grid frequency               | 50 Hz                  |                               |                                                                                                              |
| Off-grid voltage distortion rate | < 1 % (linear load)    |                               |                                                                                                              |
| Unbalanced Load Capacity         | 100%                   |                               |                                                                                                              |

When installed indoors, a minimum ventilation capacity of 10kW is required.