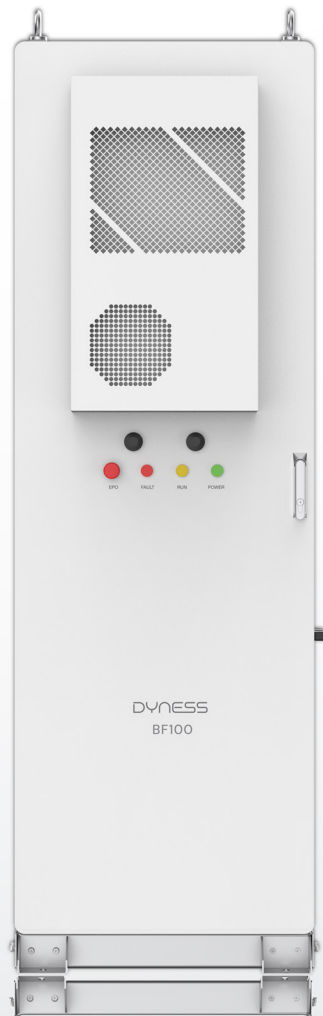




BF100

USER MANUAL

EnerCore
Outdoor Air-cooling
Battery Cabinet

3. Product Description

3.1. Product Overview

The product is an outdoor battery cabinet, including PACK, BDU (integrated BMS and EMS), fire protection system, air conditioning system and so on. With the hybrid inverter converted to AC output, it can be widely used in charging stations, commercial buildings, manufacturing and other small-scale industrial and commercial scenarios.

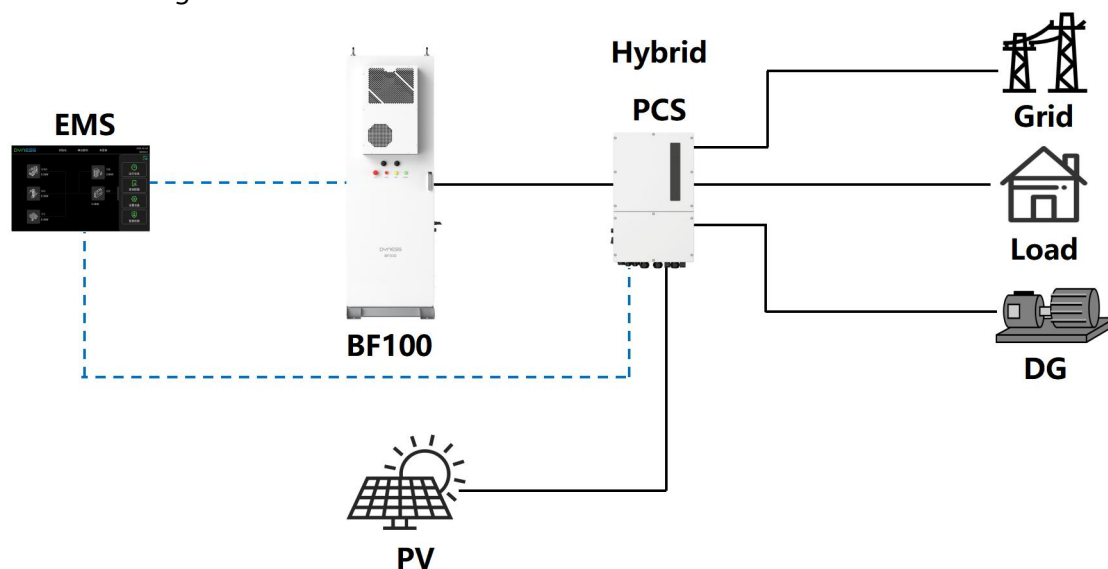


Figure 3-1 System Application Principle

3.2. Product Model

This manual applies to outdoor battery cabinet products (BF100) of Enercore series. The definition are explained as below:

- EnerCore: Product series name
- B: Battery, Dyness battery series product
- F: Fan/air-cooling system
- 100: Battery capacity of standard model
- C: Indicate system capacity, the number after "C" means the initial system capacity of different model, unit: kWh

Table 3-1 Product Model

No.	Model	Description
1	BF100-C70	Battery cabinet, Nominal capacity: 71kWh
2	BF100-C80	Battery cabinet, Nominal capacity: 86kWh
3	BF100-C100	Battery cabinet, Nominal capacity: 100kWh

3.3. Product Configuration

The product adopt modular design which is more convenient for installation, operation and maintenance

- 1) The product including PACK, BDU (integrated BMS and EMS), fire protection system, air conditioning system and so on;
- 2) The product is equipped with composite detector (incorporating smoke/ gas/ temperature detectors), water immersion detector, aerosol and other facilities, making the product safer;
- 3) The product is equipped with EMS, which could achieve effective and reliable energy management, enables remote monitoring and program upgrade through Ethernet, 4G and RS485 network access;
- 4) The product is equipped with breakers, fuses, contactors and other disconnect devices to achieve reliable power cutoff, ensuring personnel and equipment safety.

Table 3-2 Product Configuration List

Module	Function	Qty.	Config.
PACK	For electrical storage	5~7	Standard
BDU	BMS: Collect battery information and control battery charging and discharging	1	Standard
	EMS: Energy management and total control of the entire system		Standard
Fire protection system	Timely warning of battery thermal runaway and making correct instructions	1	Standard
Air conditioner system	Adjust battery working temperature to ensure it works under optimal temperature	1	Standard

3.4. System Parameters

BF100 parameters is shown as follows (The parameter may vary without notice during product upgrade):

Table 3-3 BF100 Parameter

Model	BF100-C70	BF100-C80	BF100-C100
Battery			
Battery Type	LFP (LiFePO ₄)		
Battery Capacity	280Ah		
Rated Current	140A		
Max. Current	160A		
PACK Configuration	1P16S		
PACK Quantity	5 PACK/Cluster	6 PACK/Cluster	7 PACK/Cluster
Voltage Range	232~288Vdc	278.4~345.6Vdc	324.8~403.2Vdc
Nominal Capacity	71kWh	86kWh	100kWh
System			
Weight	1100±100kg	1200±100kg	1300±100kg
Dimension (W*D*H)	725*1224*2258mm		

Max. Efficiency	≥94% (TBD)
Air Conditioner Power	2kW (Cooling), 1kW (Heating)
Temperature	-20~50℃ (Derating above 45℃)
Humidity	0~95%RH (Non-condensing)
Ingress Protection	IP55
Anti-corrosion Grade	C3/C5
Cooling Method	Air-cooling
Noise	≤65dB (TBD)
Elevation	3000m (Derating above 2000m)
Display	Touch screen
Fire Protection	Aerosol/Perfluorohexanone
Communication	Ethernet/4G/RS485
Certification	CE

3.5. Appearance Design

- Dimension(W*D*H): 1200*1224*2258mm (Rings not included)
- Net weight: Approx 1300kg (Model BF100-C100 as reference)
- Ingress protection grade: IP55
- Anti-corrosion level: C3/C5 optional

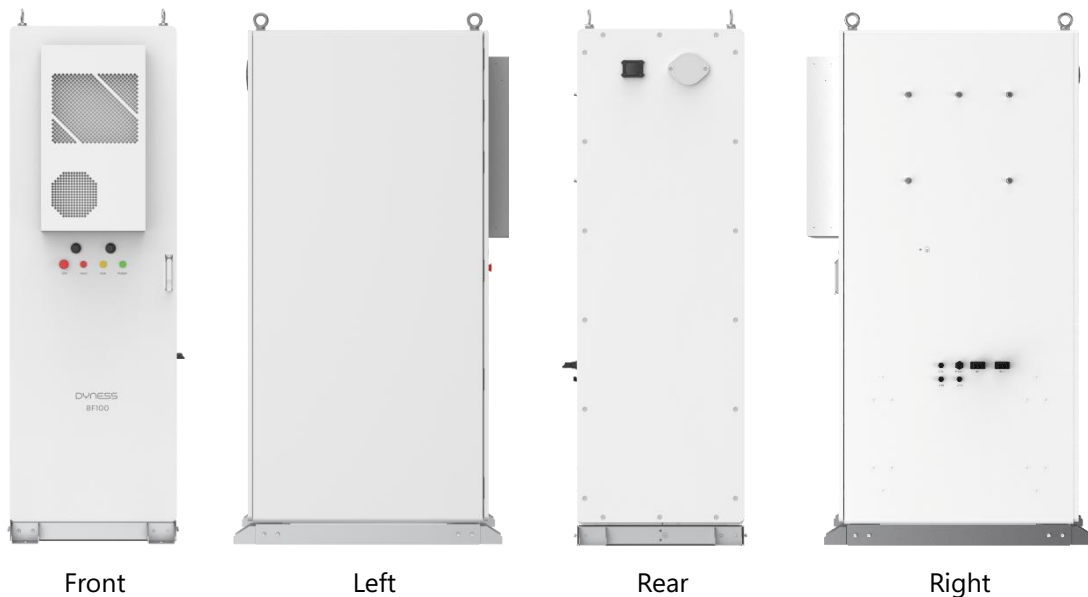
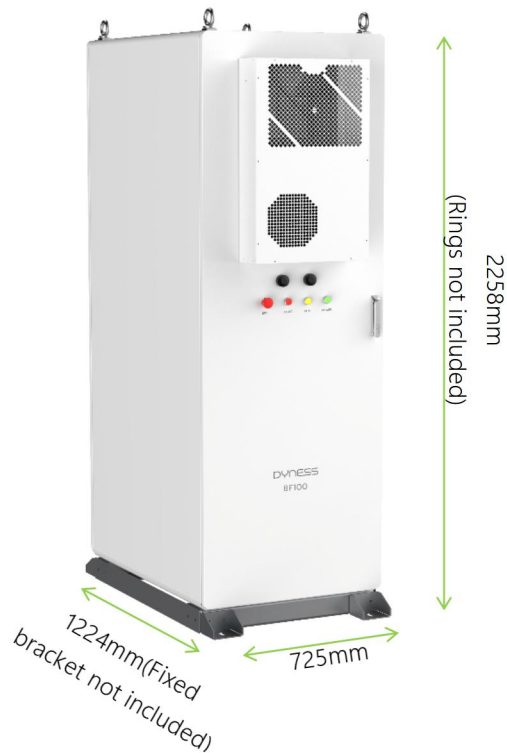


Figure 3-2 Product Appearance

The front panel of the product is equipped with 1 emergency stop button, 3 indicator lights showing the main operating status of the product, and 2 antennas: Antennas from left to right: 4G, GPS;