All-in-one Air-cooled ESS Container

ECO-E20FT2860WS

Brief

The 20-ft air-cooled ESS container product integrates PACK, BMS, PCS, EMS, HVAC and fire safety system in one container which has advantages such as high energy density, easy transportation, fast installation and high Ingress Rating. With AC output voltage of 690Vac, it can be connected to grid at medium-/high-voltage levels combined with step-up transformation. The 20-ft air-cooled ESS container product can be applied to power generation side, grid side, as well as C&I ESS scenarios which has strict requirements on power and capacity.



Features



Safety and Reliability

High energy density, long service life and reliability with high-quality LFP cells.



Intelligent Temperature Control

The cells temperature difference less than $6\,^\circ\text{C}$ in the system.



Intelligent Stringing

One-cluster-one-modular-PCS strategy to achieve precise control of cells consistency.



high charging/discharging efficiency, supporting various scenarios such as microgrid, backup power, blackstart, demand response.

Low self energy consumption and

Economic and Efficient



Intelligent O&M

Triple-level BMS&EMS architecture to achieve real-time monitoring of PACK, PCS, HVAC, fire safety etc,. to reduce cost and complexity of O&M



Precise Temperature Control

Each A/C unit corresponds to one battery compartment to consistently and precisely control ventilation of air flow.

Specifications

DC Part

Battery Type	LFP
Cell Specification	3.2V/280Ah
Grouping	8*1P400S
Rated Energy	2867.2kWh
Voltage Range	1120~1460V
Rated Charge / Discharge Rate	0.5P

AC Part

Rated Power	1433.6kW
Rated Voltage	AC690V
Nominal Frequency	50/60 Hz
PCS Configuration	200kW modular type
Number of PCS	8 units
Isolation Method	Non-transformer isolation
Cooling	Air conditioning cooling

General

Dimensions (W*H*D):	6058*2438*2896mm
Weight	28t
Ingress Rating	IP55
Operating Temperature	-25°C to 55°C (Derating for temperature >45°C)
Humidity	0% to 95% (non-condensing)
Maximum Altitude	2000m (Derating for altitudes >2000m)
Cooling	Forced air cooling with temperature control
Fire Safety	Fire protection with 1230 gas, combustible gas detection + exhaust + fire protection with water
Connectivity	Ethernet
Compliance	PACK: IEC62619, IEC63056, IEC61000, UN38.3 PCS: IEC62477-1, IEC61000

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