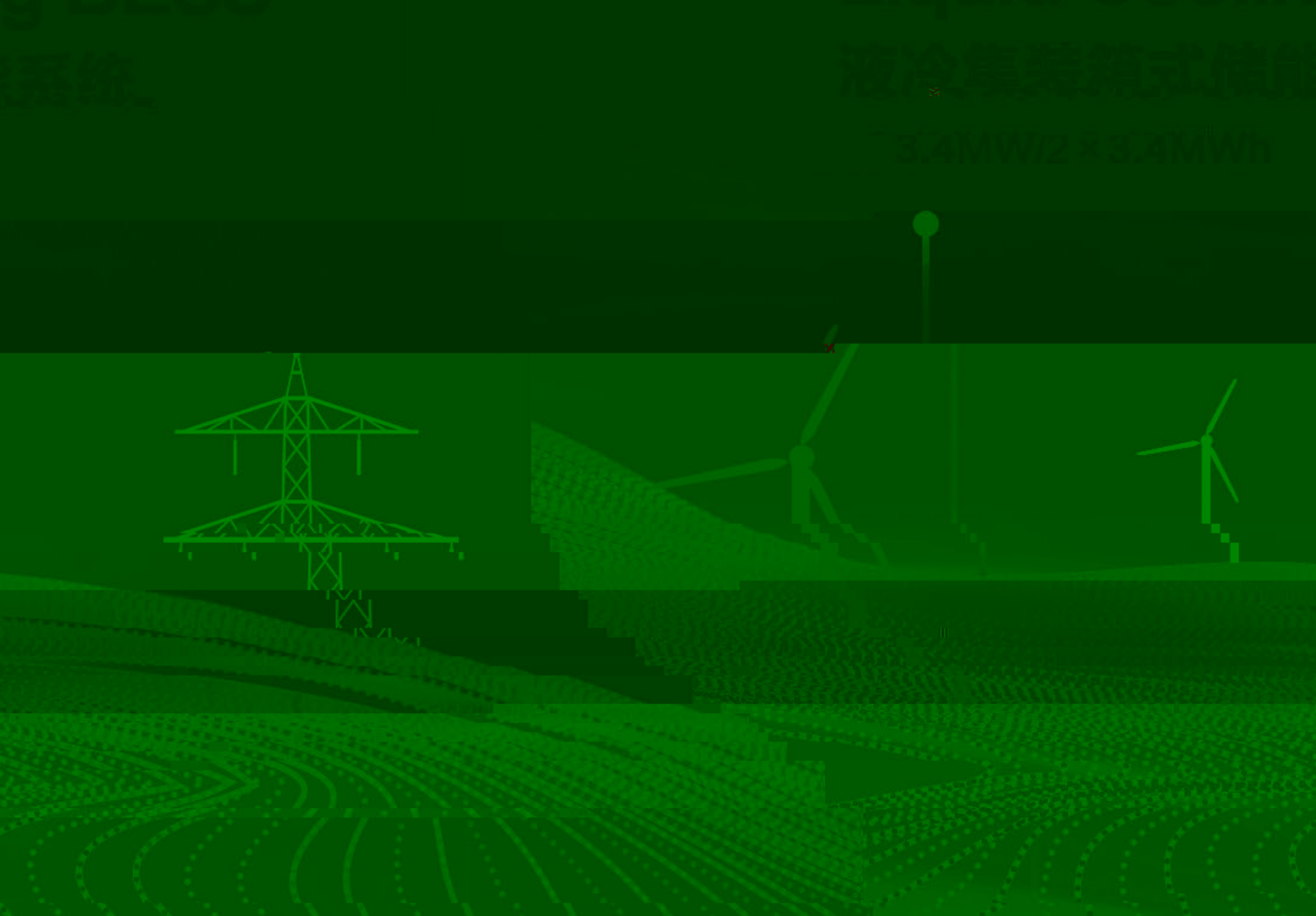


DT00

Liquid Cooling



产品介绍 Product Description

本产品包含 1 个电池集装箱、BMS 系统、热管理系统、消防系统，其中最基本的电池单元、BMS 主要负责收集电芯、电池 PACK 和柜体信息，以及其他设备通讯。热管理系统负责整个电柜系统的制冷、加热。消防系统负责整个电柜系统的消防状态检测以及火灾预防。

The product consists of 1 battery container, BMS, TMS (thermal management system), and firefighting system. The battery cell is the basic battery unit. The BMS collects the operating data of the cells, packs and racks, and communication devices. The TMS controls the cooling and heating of the battery system.

使用环境 Operation Environment Requirements

项目 Parameters	参数值 Values
1 存储环境温度 Storage Environment Temp.	-30~60°C
2 工作环境温度 Operation Environment Temp.	-25~55°C
3 工作环境湿度 Operation Environment Humidity	RH≤95% 无凝露 w/o condensation
4 工作海拔要求 Operation Altitude	≤3000m, >3000m 降额使用 ≤3000m, output derated

when altitude >3000m

电池柜 Battery Container

组成部件 Component	数量 Qty.	备注 Note
1 电池预制舱 Battery Container	1	单项包含 1.1-1.3 Including 1.1-1.3
1.1 电池簇 Battery Cluster	8	1P416S
1.2 热管理系统(水冷机组+水冷管) Thermal Management System (Chiller+Water Pipe)	1	包含制冷模式、加热模式 Multi-TMS mode and standby
1.3 消防系统 Firefighting System	1	烟雾传感器 Smoke sensor extinguisher
2 BMS	1	
3 变流升压系统 Power Conversion and Transformer	1	
4 EMS	1	

3 below

制冷模式、自循环模式、待机模式
Modes: cooling, heating, self-circulation

烟雾传感器、温度传感器、六氟化硫
Smoke sensors, temperature sensors, perfluoro
hexafluoride

产品技术参数 Technical Data Sheet

项目 Parameters	参数值 Values
电芯 The Cell	
1 电芯类型 Type	磷酸铁锂 LFP
2 电芯规格 Specification	3.2V/280Ah
3 额定倍率 Rated C-Rate	0.5CP
4 最大倍率 Max C-Rate	1.0CP
5 循环寿命 Life Cycle	6000 times@25°C、0.5CP
6 日历寿命 Life Span	20年 20 years
电池模组 Battery Module	
7 组合方式 Serial Configuration	1P52S
8 额定容量 Rated Capacity	280Ah
9 额定电压 Rated Voltage	166.4V
10 电压范围 Voltage Range	145.6~189.8V
11 额定能量 Rated Energy	46.592kWh
12 额定倍率 Rated C-Rate	0.5CP
13 最大倍率 Max C-Rate	1.0CP
14 PACK内电芯温差 Cell Temp. Deviation in PACK	≤2°C
电池簇 Battery Cluster	
15 标称电压 Nominal Voltage	1331.2V
16 电压范围 Voltage Range	

电池舱系统 Battery Container

项目 Parameters

参数值 Values

27 存储环境温度 Storage Environment Temp.

-40°C~60°C

28 工作相对湿度 Relative Working Humidity

0~100% (无凝露)
0~100% (w/o condensation)

29 海拔高度 Working Environment Altitude

不高于3000m (超过 3000m 降额使用)
≤3000m (Output derated
when altitude > 3000m)

30 冷却方式 Cooling

液冷 Liquid-cooling

31 消防系统 Firefighting System

PACK级消防+水消防+可燃性气体检测+泄爆设计
PACK-Level Fire Protection + Water Fire
Protection + Combustible Gas Detection +
Explosion Relief Design

32 辅助供电 Auxiliary Power Supply

400VAC/50Hz/ 3/PE

33 系统通讯接口 Communication Interface

CAN, RS485, Ethernet

34 标准认证 Standard Certification

GB3276, IEC 62619

35 防护等级 IP Class

IP55

36 尺寸(宽*深*高) Dimensions (W*D*H)

6058mm*2600mm*2850mm

37 重量 Weight

35 Tons

辅助电源 Auxillary Power Supply

28 制冷/制热功率 Cooling/Heating Power

制冷25kW, 制热10kW

柜体基本参数 Cabinet General Parameters

1 柜体尺寸(宽*深*高) Cabinet Dimensions (W*D*H)

2600mm*6058mm*2850mm

2 重量 Weight

35 Tons

3 防护等级 IP Class

IP55

4 符合标准认证 Standard Certification

IEC 62619
Modular TOP

认证 Certification

5, IEC 62619:2022, IEC 63056

UL 1004, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-3, IEC 60068-2-4, IEC 60068-2-5, IEC 60068-2-6, IEC 60068-2-7, IEC 60068-2-8, IEC 60068-2-9, IEC 60068-2-10, IEC 60068-2-11, IEC 60068-2-12, IEC 60068-2-13, IEC 60068-2-14, IEC 60068-2-15, IEC 60068-2-16, IEC 60068-2-17, IEC 60068-2-18, IEC 60068-2-19, IEC 60068-2-20, IEC 60068-2-21, IEC 60068-2-22, IEC 60068-2-23, IEC 60068-2-24, IEC 60068-2-25, IEC 60068-2-26, IEC 60068-2-27, IEC 60068-2-28, IEC 60068-2-29, IEC 60068-2-30, IEC 60068-2-31, IEC 60068-2-32, IEC 60068-2-33, IEC 60068-2-34, IEC 60068-2-35, IEC 60068-2-36, IEC 60068-2-37, IEC 60068-2-38, IEC 60068-2-39, IEC 60068-2-40, IEC 60068-2-41, IEC 60068-2-42, IEC 60068-2-43, IEC 60068-2-44, IEC 60068-2-45, IEC 60068-2-46, IEC 60068-2-47, IEC 60068-2-48, IEC 60068-2-49, IEC 60068-2-50, IEC 60068-2-51, IEC 60068-2-52, IEC 60068-2-53, IEC 60068-2-54, IEC 60068-2-55, IEC 60068-2-56, IEC 60068-2-57, IEC 60068-2-58, IEC 60068-2-59, IEC 60068-2-60, IEC 60068-2-61, IEC 60068-2-62, IEC 60068-2-63, IEC 60068-2-64, IEC 60068-2-65, IEC 60068-2-66, IEC 60068-2-67, IEC 60068-2-68, IEC 60068-2-69, IEC 60068-2-70, IEC 60068-2-71, IEC 60068-2-72, IEC 60068-2-73, IEC 60068-2-74, IEC 60068-2-75, IEC 60068-2-76, IEC 60068-2-77, IEC 60068-2-78, IEC 60068-2-79, IEC 60068-2-80, IEC 60068-2-81, IEC 60068-2-82, IEC 60068-2-83, IEC 60068-2-84, IEC 60068-2-85, IEC 60068-2-86, IEC 60068-2-87, IEC 60068-2-88, IEC 60068-2-89, IEC 60068-2-90, IEC 60068-2-91, IEC 60068-2-92, IEC 60068-2-93, IEC 60068-2-94, IEC 60068-2-95, IEC 60068-2-96, IEC 60068-2-97, IEC 60068-2-98, IEC 60068-2-99, IEC 60068-2-100

25	直流过流/短路保护 DC Overcurrent/Short Circuit Protection	有 Yes
26	交流过压/欠压保护 AC Overvoltage/Undervoltage Protection	有 Yes
27	交流过频/欠频保护 AC Overfrequency/Underfrequency Protection	有 Yes
28	交流进线相序错误保护 AC Incoming Phase Sequence Error Protection	有 Yes
29	直流过流/短路保护 DC Overcurrent/Short Circuit Protection	有 Yes
30	直流过压/欠压保护 DC Overvoltage/Undervoltage Protection	有 Yes

系统 System

变流升压舱示意图

Power Conversion and
Load Transformer

应用领域 Application Markets



储能系统 Power Grid Side BESS

地面光伏电站 Solar PV Power Plant

风力发电厂 Wind Power Station

电网侧储能



半导体工厂

光伏微电网 Micro-Grid for Solar PV, BESS and Diesel Generator

矿区 Mines

半导体工厂 Semi-Conductor Factory

成功案例 Successful Cases

成功案例 Success

2MW/4MWh

收益：

削峰填谷、备用电源、降本增效。

Benefits: peak shaving, backup power supply, cost efficiency.

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