

Power Ocean- 电力储能用锂离子电池舱

Power Ocean- Lithium ions Battery Container for Electric ESS



● 风冷 (Air Cooled)
ESD1126.4-05P2703.3



● 液冷 (Liquid Cooled)
ESD1267.2-05P3421.4



● 液冷 (Liquid Cooled)
ESD1280-05P3840

集装箱储能系统有助于能源的使用和管理，减少电费支出，应用于发电侧、电网侧、大型工业用户等对能量调节需求较大且集中分布场景。

The design of ESS system is to reduce the cost and maintain the grid stability. The significant benefits as follows :

- 1)enhance power system reliability;
- 2)reduce the power cost and minimize the potential for power loss;3)peak load shifting.



高能量密度 High Energy Density

拥有超高的体积能量密度
Very high volumetric energy density

具备双舱并联、节省占地空间
Double containers in parallel to save space



标准化 Standardization

模块化设计，布局合理，维护便捷
Modular design, reasonable layout, convenient maintenance

20 英尺标准集装箱便于装卸、运输及安装
Standard containers are easy to load and unload, transport and install



超高安全性 Ultra High Security

电芯级温度监测 + 电芯级热阻隔
Cell-level temperature monitoring,
Cell-level thermal barrier

PACK 级浸没抑制 + 全淹没气体灭火
+ 整舱消防水喷淋

PACK-level submersion suppression
+ fully submerged gas extinguishing
+ whole container fire sprinkler



智能温控技术 Intelligent Temperature Control Technology

模块化可调管路实现高均温性能
Modular adjustable piping for excellent temperature
uniformity

BMS+ 液冷联动控制实现高效节能
BMS+liquid cooling linkage control for high efficiency and
energy saving

型号 /Model	ESD1126.4-05P2703.3	ESD1267.2-05P3421.4	ESD1280-05P3840
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电气参数 /ELECTRICAL

电芯容量	Cell Capacity	100Ah	300Ah	300Ah
标称能量	Nominal Capacity	2703.3kWh	3421.4kWh	3840kWh
推荐使用电压范围	Recommended Voltage	985.6~1267.2Vdc	1108.8-1425.6Vdc	1120-1440Vdc
标称电压	Rated Voltage	1126.4Vdc	1267.2Vdc	1280Vdc
最大充电倍率	Max Charge Rate	0.5 P@25°C	0.5P@25°C	0.5P@25°C
最大放电倍率	Max Discharge Rate	0.5 P@25°C	0.5 P@25°C	0.5 P@25°C
最大充电功率	Max Charge Power	1351.6kW (0.5P)	1710.7kW(0.5P)	1920kW(0.5P)

环境参数 /ENVIRONMENTAL

工作温度范围	Operating Temperature Range	-30~45°C	-30~45°C	-30~45°C
工作湿度范围	Operating Humidity Range	0-95 %	0-95 %	0-95 %
防护等级	Enclosure Protection Rating	IP54	IP54	IP54
冷却方式	Cooling	风冷 (空调) Air-conditioning	液冷 Liquid Cooled	液冷 Liquid Cooled
消防系统	Fire Fighting System	七氟丙烷 / 全氟己酮 HFC-227ea/Novoc1230	七氟丙烷 / 全氟己酮 HFC-227ea/Novoc1230	七氟丙烷 / 全氟己酮 HFC-227ea/Novoc1230
海拔	Altitude	< 3000m	< 3000m	< 3000m

通讯方式 /COMMUNICATIONS

通讯方式	Communication	CAN、RS485、Ethernet	CAN、RS485、Ethernet	CAN、RS485、Ethernet
符合标准	Certification	UL1973、UL9540A、 IEC62619*、UN38.3、 IEC62477*、IEC61000* IEC60730*、IEC62933*	UL1973、UL9540A、 IEC62619*、UN38.3、 IEC62477*、IEC61000* IEC60730*、IEC62933*	UL1973*、UL9540A*、 IEC62619*、UN38.3*、 IEC62477*、IEC61000* IEC60730*、IEC62933*

结构参数 /STRUCTURAL

尺寸	Dimensions (W*D*H)	6058mm x 2438mm x 2896mm	6058mm x2438mm x 2896mm	6058mm x 2438mm x 2896mm
重量	Weight	≈ 32t	≈ 37t	≈ 40t

* 相关测试进行中 Tests are under way