

# PowerStack Liquid Cooling Commercial Energy Storage System(Off-grid)



## LOW COSTS

- Highly integrated ESS for easy transportation and O&M
- All pre-assembled, no battery module handling on site
- 8 hour installation to commission



## SAFE AND RELIABLE

- DC electric circuit safety management includes fast breaking and anti-arc protection
- Multi level battery protection layers formed by discreet standalone systems offer impeccable safety
- Intelligent leakage protection and liquid refilling system



## EFFICIENT AND FLEXIBLE

- Intelligent liquid cooling ensures higher efficiency and longer battery cycle life
- Modular design supports parallel connection and easy system expansion
- Front Cable Entry, save cable tray



## SMART AND ROBUST

- Fast state monitoring and faults record enables pre-alarm and faults location
- Integrated battery performance monitoring and logging



Product Name	ST535kWh-250kW-2h	ST570kWh-250kW-2h	ST1070kWh-250kW-4h	ST1145kWh-250kW-4h
<b>Battery cabinet data</b>				
Cell type	LFP			
System battery configuration	300S2P	320S2P	300S2P * 2	320S2P * 2
Battery capacity (BOL) at DC side	537 kWh	573 kWh	537 kWh * 2	573kWh * 2
System output voltage range	810 ~ 1095 V	864 ~ 1168 V	810 ~ 1095 V	864 ~ 1168 V
Dimensions of battery unit (W * H * D)	2180 * 2450 * 1730 mm (single cabinet )			
Weight of battery unit	5900 kg (single cabinet)	6100 kg (single cabinet)	5900 kg (single cabinet)	6100 kg (single cabinet)
Degree of protection	IP54			
Anti-corrision grade	C3			
Relative humidity	0 ~ 95 % (non-condensing)			
Operating temperature range	- 30 to 50 °C ( > 45 °C derating)			
Max. working altitude	3000 m			
Cooling concept of battery chamber	Liquid cooling			
Fire safety equipment	Aerosol ,flammable gas detector and exhausting system			
Communication interfaces	Ethernet			
Communication protocols	Modbus TCP			
Compliance	IEC62619,IEC63056,IEC62040,IEC62477,UN38.3			
<b>PCS cabinet data</b>				
Nominal AC power	250 kVA@45 °C			
Max.THd of curretn	< 3 % (at nominal power)			
DC component	< 0.5 % (at nominal power)			
Nominal grid voltage	400 V			
Nominal grid voltage range	360 V ~ 440 V			
Nominal grid frequency	50 / 60 Hz			
Nominal grid frequency range	45 Hz ~ 55 Hz, 55 - 65 Hz			
Dimensions (W*H*D)	1800 * 2450 * 1230 mm			
Weight	1600 kg			
Degree of protection	IP54			
Anti-corrision grade	C3			
Allowable relative humidity range	0 ~ 95 % (non-condensing)			
Operating temperature range	- 30 to 50°C (> 45°C derating)			
Max. working altitude	3000 m			
Communication interfaces	Ethernet			
Communication protocols	Modbus TCP			
Compliance	IEC61000,IEC62477,AS4777.2			
<b>Transformer cabinet data</b>				
Transformer capacity	250 kVA@45 °C			
Nominal grid voltage	400 V / 400 V			
Nominal grid frequency	50 / 60 Hz			
Dimensions (W*H*D)	1200 * 2000 * 1200 mm			
Weight	1500 kg			
Degree of protection	IP54			
Anti-corrision grade	C3			
Allowable relative humidity range	0 ~ 95 % (non-condensing)			
Operating temperature range	-30 to 50°C (> 45°C derating)			
Max. working altitude	3000 m			

