

# ST225kWh-110kW-2h-AU

PowerStack Liquid Cooled C&I Energy Storage System

NEW



## LOWER COST

- Fully integrated system design with pre-installation and pre-commissioning, to reduce commissioning work on site
- Innovative AI bionic thermal balance, 33 % reduction in all-day system heat loss
- Balanced heat dissipation by liquid cooling, the cell temperature difference  $\leq 2.5$  °C



## SAFE AND RELIABLE

- AI monitoring of cell health with early warning, to manage thermal runaway
- PACK, RACK, PCS three-level overcurrent protection
- Three-level fire safety design and accurate early warning of thermal runaway, to prevent fire event



## EFFICIENT AND FLEXIBLE

- High-efficiency PCS with max. efficiency 98.5 %
- Seamless side by side parallel connection



## SMART AND ROBUST

- iSolarCloud App or Web cloud monitoring, to provide real-time alarm and troubleshooting solution
- Near-distal intelligent wireless operation and one-key remote upgrade, to reduce labour O&M cost



Product name	ST225kWh-110kW-2h-AU
<b>DC side</b>	
Cell type	LFP 3.2 V / 280 Ah
System battery configuration	256S1P
Nominal capacity	229 kWh
Nominal voltage range	691.2 V ~ 934.4 V
<b>AC side (on-grid)</b>	
Nominal power	110 kW
Nominal voltage	400 V
Voltage range	340 V ~ 440 V
Nominal frequency	50 Hz
Frequency range	45 Hz ~ 55 Hz
Max.TH.D of current	< 3 % ( Nominal power )
DC component	< 0.5 % ( Nominal power )
Power factor range	1.0 leading ~ 1.0 lagging
<b>AC side (off-grid) *</b>	
Nominal voltage	400 V
Nominal frequency	50 Hz
Max.TH.D of voltage	< 3 % ( Linear load )
Unbalance load capacity	100 %
<b>System parameter</b>	
Dimension ( W * H * D )	1150 mm * 2450 mm * 1610 mm
Weight	3100 kg
Degree of protection	IP55
Auxiliary power supply	Internal power supply (Default) External power supply (Optional)
Anti-corrosion degree	C5
Operation humidity range	0 % ~ 100 %
Operation temperature range	-30 °C ~ 50 °C ( > 45 °C derating )
Max. operating altitude	3000 m
Temperature control method	Intelligent liquid cooling
Noise	≤ 70 dB @ 1 m
Fire suppression system	Default : Flammable gas detector, Smoke detector, Heat detector, Alarm sounder, Aerosol Optional : Sprinkler
Communication interface	Ethernet
Communication protocol	Modbus TCP
Standard	IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 61000, UN 38.3, AS/NZS 4777.2, AS/NZS 3000
Max.Parallel quantity (off-grid)	10
<b>Transformer cabinet parameter *</b>	
Transformer capacity	250 kVA
Primary side voltage / Secondary side voltage	400 V / 400 V ( Dyn11 )
Nominal frequency	50 Hz
Dimensions (W*H*D)	1200 mm * 2000 mm * 1200 mm
Weight	1500 kg
Degree of protection	IP55
Anti-corrosion degree	C5
Operation humidity range	0 % ~ 100 %
Operation temperature range	-30 °C ~ 50 °C ( > 45 °C derating )
Max. operating altitude	3000 m
Temperature control method	Air cooling
<b>Energy management system</b>	
EMS	EMS300CP
Functions	FCAS, Peak shaving, Emergency backup, Peak-valley arbitrage, Demand control, Zero-export, Integrated control of PV, ESS and diesel generator, etc.

\* A transformer cabinet is needed additionally when the system is in off-grid mode.

