

# ST225kWh-110kW-2h

PowerStack Liquid Cooled Commercial Energy Storage System

**NEW** Preliminary



## LOW COSTS

- 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  $\leq 2.2$  °C

## SAFETY AND RELIABLE

- Seamless transition (< 20 ms) to provide continuous power supply for off-grid operation
- 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 98.6 %
- Seamless side by side parallel connection
- Supporting 2 - 4h system

## 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



Technical Data	ST225kWh-110kW-2h
<b>DC side</b>	
Cell type	LFP
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.THD of current	< 3 % ( at nominal power )
DC component	< 0.5 % ( at 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.THD of voltage	< 3 % ( linear load )
Unbalance load capacity	100 %
<b>System data</b>	
Dimension ( W * H * D )	1150 mm * 2450 mm * 1610 mm
Weight	≤ 2900 kg
Degree of protection	IP55
Auxiliary power supply	Internal power supply / External power supply
Anti-corrosion degree	C3 / C5
Operation humidity range	0 % - 100 % ( non-condensing )
Operation temperature range	-30 °C - 50 °C ( > 45 °C derating )
Highest altitude	3000 m
Temperature control method	Intelligent liquid cooling
Noise	≤ 70 dB
Fire suppression system	Smoke detector, audible alarm, aerosol, sprinkler
Communication interfaces	Ethernet
Communication protocols	Modbus TCP
Standard	IEC62619, IEC63056, IEC62040, IEC62477, UN 38.3, IEC61000, AS/NZS 4777.2, AS/NZS 3000
Max.Parallel quantity (off-grid)	≤ 10
<b>Transformer cabinet data**</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	IP54
Anti-corrosion degree	C3 / C5
Operation humidity range	0 % - 100 % ( non-condensing )
Operation temperature range	-30 °C - 50 °C ( > 45 °C derating )
Highest altitude	3000 m
Temperature control method	Air cooling

\*When the system is in off-grid mode, a transformer cabinet needs to be configured

\*\*Additional configuration

