

# ST225kWh-110kW-2h-AU

# ST455kWh-110kW-4h-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 controlled thermal balance, 33 % reduction in all-day system heat loss
- Balanced heat dissipation by liquid cooling, the cell temperature difference  $\leq 2.5^{\circ}\text{C}$



## 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 %
- 25 units seamless side by side parallel connection
- Support on grid/off grid/automatic switching



## SMART AND ROBUST

- Fast / Very fast FCAS application
- 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	ST455kWh-110kW-4h-AU
DC side		
Cell type	LFP 3.2 V / 280 Ah	
System battery configuration	256S1P	256S2P
Nominal capacity	229 kWh	458 kWh
Nominal voltage range	691.2 V ~ 934.4 V	
AC side		
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 % ( Nominal power )	
DC component	< 0.5 % ( Nominal power )	
Power factor range	1.0 leading ~ 1.0 lagging	
System parameter		
Dimension ( W * H * D )	1150 mm * 2450 mm * 1610 mm	2152 mm * 2470 mm * 1610 mm
Weight	≤ 3100 kg	≤ 5300 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 : Ventilation system, 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	
Energy management system		
EMS	EMS300CP	
Functions	FCAS, Peak shaving, Emergency backup, Peak-valley arbitrage, Demand control, Zero-export, Integrated control of PV, ESS and diesel generator, etc.	