

ST255CS-2H-US

PowerStack Liquid Cooled C&I Energy Storage System

NEW



LOWER COST

- Integrated Pre-installation: High-degree integrated system with pre-installation and pre-commissioning reduces on-site commissioning work
- Intelligent Liquid Cooling: Innovative intelligent thermal balance cuts down daily system heat loss by 40%
- Precise Liquid-Cooling Temperature Equalization: Liquid-cooled balanced heat dissipation keeps the cell temperature difference $\leq 2.5^{\circ}\text{C}$



EFFICIENT AND FLEXIBLE

- High-efficiency Power Conversion: DC/AC power converter unit features a high efficiency of up to 98.6%
- Seamless Installation: Cabinets can be installed side by side seamlessly for a smooth appearance



SAFE AND RELIABLE

- Hassle-free Aftersales Service: Strong global after-sales one-stop service & support
- Three-level over-current Protection: Three -level over-current protection for PACK, RACK, and PCS
- Three-level fire-prevention Design: Three-level fire-prevention design with accurate early warnings for thermal runaway to prevent fires
- Robust: Cover all scenario applications
- Pre-delivery test Assurance: Over 500 Tests from Cell to System to Ensure System Safety



Type designation	ST255CS-2H-US
DC side	
Cell type	LFP 3.2 V / 314 Ah
System battery configuration	256S1P
Nominal capacity	257 kWh
Nominal voltage range	767 V ~ 934.4 V
AC side (On-Grid)	
Nominal power	125 kVA @ 45 °C (113 °F)
Nominal voltage	480 V
Access way	3P3W
Voltage range	422.4 V ~ 528 V
Nominal frequency	60 Hz
Frequency range	55 Hz ~ 65 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	
Dimensions (W * H * D)	1150 mm * 2450 mm * 1610 mm 3'9" * 8'0" * 5'3"
Weight	≤ 3000 kg 6614 lbs
Degree of protection	NEMA 3R
Auxiliary power supply	Internal power supply
Anti-corrosion degree	C4-L
Operation humidity range	0 % ~ 100 % (Non-condensing)
Operation temperature range	-30 °C ~ 50 °C (> 45 °C derating) -22 °F ~ 122 °F (> 113 °F derating)
Max. operating altitude	2000 m 6561.7 ft
Temperature control method	Liquid cooling
Noise	≤ 65 dB @ 1 m
Fire suppression system	Combustible gas detector, Smoke detector, Heat detector, Alarm sounder, ventilation system, Water-based fire suppression
Communication interface	Ethernet
Communication protocol	Modbus TCP
Standard	UL1741 SB , IEEE1547:2018 UL 1973, UL 9540A, UL 9540, NFPA855, NFPA69, UN 38.3