

ST6900UX-4H

PowerTitan 3.0 Liquid Cooled Energy Storage System Datasheet



LOWER LIFETIME LCOS

- High-efficiency stacked cell and SiC PCS, enhancing system RTE
- High energy density battery cell and high power density PCS, enhancing 20ft battery cabinet capacity increased by 33 %
- Pre-installed, pre-commissioned, one-click array configuration, one-click inspection



SAFE AND RELIABLE

- Thermal runaway early warning and control, lithium plating diagnosis
- ArcDefender™ energy storage DC arc detection
- Wireless-free deployment, end-to-end communication encryption



ENHANCED GRID STABILITY

- ms-level voltage regulation, enhancing grid voltage stability
- Flexible inertia support, enhancing frequency stability
- Incremental dynamic virtual impedance, enhancing phase angle stability
- 90ms plant-level response and precise regulation, empowering high-flexibility grid



Product Name		ST6900UX-4H
DC Side		
Cell type	LFP	
Nominal capacity	6904 kWh	
Nominal voltage range	1101.6 V ~ 1489.2 V	
AC Side		
Nominal AC power	450 kVA * 4	
THDi	< 1 % (Nominal Power)	
DC component	< 0.5 %	
Nominal AC voltage	690 V	
AC voltage range	621 V ~ 759 V	
Norminal AC current	414A*4	
Power factor at nominal power / Adjustable power factor	> 0.99 / 1 leading ~ 1 lagging	
Adjustable range of reactive power	-100 % ~ 100 %	
Nominal frequency	50 Hz / 60 Hz	
Isolation method	Transformerless	
System parameter		
Dimensions (W * H * D)	6058 mm * 2896 mm * 2438 mm	
Weight	55000 kg	
Degree of protection	IP55	
Anti-corrosion degree	C4	
Operation temperature range	-30 °C ~ 45 °C	
Operation humidity range	0 % ~ 100 %	
Max. operation altitude	4000 m	
Temperature control method	Intelligent Liquid Cooling	
Fire suppression system	Default: FACP, Flammable gas detector, Smoke detector, Heat detector, Sounder beacon, Alarm bell, Extinguishant abort button, Ventilation system, Extinguishant release button, Gas release indicator, Aerosol Optional: Sprinkler, Explosion vent panel, Pressure relief port, FK 5112	
Communication	Ethernet	
Standard	UL 9540A, IEC 62619, IEC 61000-6-2, EN55011, IEC 62933-5-2, UN 38.3 / UN 3536, IEC 62477-1, IEC 62443-4-2	