SUNGROW
Clean power for all

ST7140UX-4H-US

PowerTitan 3.0 Liquid Cooled Battery Energy Storage System Container

LOWER LIFETIME LCOS (Levelized Cost of Storage)

- High-efficiency stacked cell and SiC PCS, enhancing system RTE
- High energy density battery cell and high power density PCS
- Pre-installed, pre-commissioned, one-click array configuration, one-click inspection

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
- Rapid plant-level response and precise regulation, empowering high-flexibility grid

SAFE AND RELIABLE

- Thermal & electric separation design
- Thermal runaway early warning and control, lithium plating diagnosis
- ArcDefender™ energy storage DC arc detection

Product Name	ST7140UX-4H-US
DC Side	
Cell type	LFP
Nominal capacity	7144 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	607.2 V ~ 759 V
Norminal AC current	377 A * 3 Phase * 4
Power factor at nominal power / Adjustable power factor	> 0.99 / 1 leading ~ 1 lagging
Adjustable range of reactive power	-100 % ~ 100 %
Nominal frequency	60 Hz
Isolation method	Transformerless
System parameter	
Dimensions (W * H * D)	6058 mm * 2896 mm * 2438 mm 238.5'' * 114.0'' * 96.0"
Weight	55000 kg 121254lbs
Degree of protection	Nema type 3s
Anti-corrosion degree	C4
Noise level	80dBA @ 1m, 35 ℃ (70dBA optional)
Operation temperature range	- 30 ℃ ~ 45 ℃ (50℃ optional)
Operation humidity range	0 % ~ 100 %
Max. operation altitude	2000m (3000m optional)
Temperature control method	Intelligent Liquid Cooling
Fire suppression system	Default: Mini FACP, Flammable gas detector, Smoke detector, Heat detector, Explosion prevention system Optional: Sprinkler, Deflagration venting panel
Communication	Ethernet
Standard	UL 9540A, NFPA 855, NFPA 68, NFPA 69 , IEEE 1547, UL 9540 , UL 1973, UL 1741, IEEE 2800