

Containerized Battery Energy Storage System

HEXP500TS-400-A



Fully Integrated, All-Scenario Solution for Rapid Deployment

Comprehensive System Components: Includes PV modules, mounting structures, cables, MPPT controllers, storage inverters, and battery systems for a complete turnkey solution.

Quick Installation: Standardized component interfaces minimize on-site customization, boosting deployment efficiency by 40%.



Direct Connection Architecture: Simple, Efficient, Lower Maintenance

Reduced Line Loss: Short-distance DC-side direct connections decrease energy loss by 15%.

Smart Diagnostics: Real-time voltage and current monitoring at each node enhances fault localization accuracy to the module level.



Rugged Industrial-Grade Design for Harsh Environments

Outdoor-Rated MPPT Controllers: Mounted directly on PV structures with IP65 protection, operating reliably in extreme temperatures from -30°C to 60°C.

Anti-Corrosion Materials: Mounting structures and connectors made of galvanized aluminum alloy, suitable for coastal, high-humidity, and other demanding climates.



Seamless Grid/Off-Grid Switching for Enhanced Reliability

Millisecond Transition: STS automatic transfer switch responds in <20ms, ensuring zero interruption for critical loads.

Flexible Multi-Mode Operation: Participate in peak shaving in grid-tied mode or provide ≥8 hours of backup power in off-grid mode.

Model		HEXP500TS-400-A
DC side parameters		
Voltage range		500-950V
Maximum current		1128A
AC side parameters (On Grid)		
Rated output power		500kW
Maximum output power		550kW
Rated output current		722A
THDi		<3%
System voltage configuration		3W+N+PE
Voltage range		360VAC~440VAC
Frequency range		45~55Hz/55~65Hz
Power factor		-1~1
AC side parameters (off-grid)		
Rated output power		500kW
Rated output voltage		400V
Rated output frequency		50/60Hz
THDu		<1% (linear), <5% (non-linear)
Overload capacity		Overload at 110% for 10 minutes
On/Off grid switching and configuration		
Bypass maintenance switch		1250A
DC switch		1250A
Load switch		1250A
Grid switch		1250A
STS Unit		1155A/800kW
STS switching time		<20ms
System parameters		
Maximum efficiency		0.975
Operating temperature		-30 ~ 55°C (derating usage above 40°C)
Relative humidity		0~95%RH, no condensation
Dimensions		1600×1050×2050mm
Weight		2700kg
Protection Level		Whole unit IP21
Noise Level		<70dB
Display		LCD
BMS Communication		CAN
EMS Communication		TCP/IP
Other parameters		
Related certificates		IEC/EN 62109-1/-2, EN 62477-1, IEC/EN 61000-6-2/-6-4, EN 50549-1/-10, NRS 097-2-1:2017ASGC, GB/T 34120, GB/T 34133, CGC-R46103:2018A, PTPIREE REV1.2:2024 TYPE B