

DC2000V 3rd Generation Energy Storage PCS

Industry-leading 2000V liquid-cooled modular PCS platform, rated 500kW, efficiency up to 99%. Wide DC input range, high power density. Suitable for generation-side and grid-side energy storage systems. Cluster-level management ensures safer, more reliable operation, lower cost and higher efficiency.

High-efficiency Liquid Cooling

Liquid cooling, excellent IGBT temperature uniformity. Max conversion efficiency 99%, CEC efficiency 98.5%.

Diverse Intelligence

PQ decoupling, VSG, black start supported. Constant power/voltage/current charge/discharge; self-developed host software.

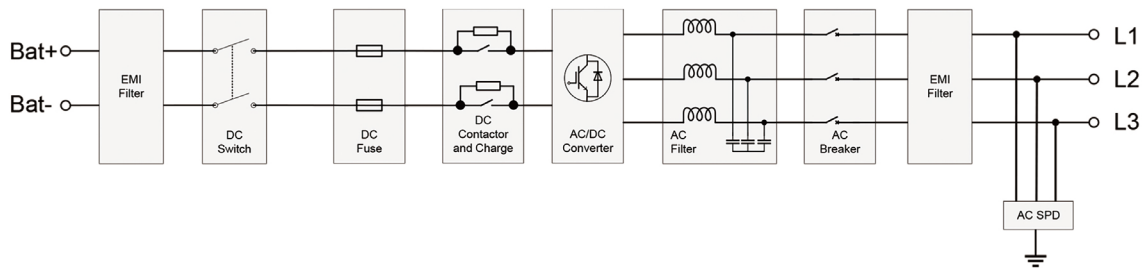
Better Performance

DC voltage up to 2250V, compatible with high-power-density cells. AC 1000V/1140V, flexible for step-up transformers.

Cost down, efficiency up

System efficiency increased by 0.5%, cost reduced by 8%. Supports high/low voltage ride-through, grid-forming capability.

Circuit Diagram



JTES-500K-W Utility-Scale HV Liquid-Cooled Energy Storage PCS

PARAMETER LIST

Model	JTES-500K-W	JTES-572K-W
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DC PARAMETERS

Maximum DC Voltage	2000V	2250V
Maximum DC Current	345A	
Battery Pack Voltage Range	1450-2050V	1600-2250V

AC PARAMETERS (On-Grid)

Rated power	500kW	572kW
Maximum AC Power	550kW	630kW
Rated Grid Voltage	1000Vac	1140Vac
Grid Connection Type	3P+PE	
Rated AC Current	289A	289A
Maximum Output Current	318A (110% rated)	318A (110% rated)
Rated Grid Frequency	50Hz / 60Hz	
THDi At Rated Power	< 3.0%	
DC Component	< 0.5%	
Power Factor Range	> 0.99 (Rated power) / -1 ~ +1	
Continuous Overload	110% Rated long term	

AC PARAMETERS (Off-Grid)

Rated power	500kW	572kW
Rated Grid Voltage	1000V	1140V
Rated Grid Frequency	50Hz / 60Hz	
THDu At Rated Power	< 3.0%(linear load)	

SYSTEM CHARACTERISTICS

Maximum Efficiency	99.00%
Cooling	Liquid (50% Ethylene glycol+50% water)
Communication	CAN / Ethernet/ RS-485
Operating Temperature range	-30°C ~ +60°C
Relative humidity	0% ~ 95% (No condensation)
Maximum Inlet Temperature	50°C
Maximum Altitude	4000m (Derating >2000m)
Noises	< 70dB (1m away from the horizontal position of the device)
Installation	Rackmount

MECHANICAL PARAMETERS

Dimension	H400mm x W650mm x D1150mm
Weight	260kg
Enclosure	IP54

