

ESS-PCS-630、ESS-PCS-500 Power Conversion System



High Security

AC/DC electrical isolation design.



Multiple Communication Protocols

Support IEC61850, Modbus, CAN2.0 and other communication protocols.



Efficiency

Three-level, maximum efficiency > 99%.



High Altitude Operation

Adaptable to work at an altitude of up to 5000m.



Quick Response

Fast dynamic response, millisecond charge-discharge conversion time.



Intelligent Air Cooling

Suitable for ambient temperature of -30 °C ~ 60 °C, no derating at 45 °C.



Easy to Expand

Support multi-machine parallel operation.

Product model	ESS-PCS-630	ESS-PCS-500
Power Level		
Rated power	630kW	500kW
Maximum capacity	693kVA	550kVA
DC Side Parameter		
Maximum DC voltage	1000V	
Maximum DC current	1167A	1111A
Battery voltage range	600~900V	500~900V
Grid-Connected AC Side Parameters		
Rated grid voltage	400V,3W+PE	315V,3W+PE
Grid voltage range	-15%~10%	
Maximum AC current	1000A	1008A
Rated grid frequency	50Hz	
THDi (Power rating)	<3%	
Adjustable range of power factor	-1~1	
Off-Grid AC Side		
Off-grid rated voltage	400V,3W+PE	315V,3W+PE
Rated frequency	50Hz	
Total distortion rate of voltage waveform	< 3% (linear load)	
Environmental Conditions		
Operating temperature	-30 ~ + 60 °C (over 45 °C derating)	
Relative humidity	≤ 95% (no condensation)	
Operating altitude	5000m (> 3000m derating)	
System Data		
Isolation mode	No transformer	
Maximum efficiency	99.03%	99.01%
Protection degree	IP20	
Cooling method	Intelligent air cooling	
Communication interface	RS485/CAN/Ethernet	
Communication protocol	Modbus-RTU/Modbus-TCP/IEC61850	
Service life	20Years	
Noise	<80dB	
Dimensions (W * H * D)	1100*1950*700mm	
Weight	700kg	