

PotisBank-L5.0-AC

Utility-Scale Liquid Cooling ESS (AC-DC Integration)



ULTRA HIGH EFFICIENT AC-DC POWER CONVERSION

- 99% conversion efficiency by built-in liquid cooling PCS
- DC arc detection for enhanced safety
- Up to 24 PCS units in parallel grid connection
- Grid-forming capability for enhanced network integration



ULTIMATE SAFETY & RELIABILITY

- 3-6 months in advance thermal runaway predication by patented iCCS + BMS
- 5 minutes earlier alarm with cell safety valve detection
- 2-hour fire resistance with explosion and pressure relief protection
- Millisecond-level fuse response and multi-level electrical safety



INTELLIGENT OPTIMIZATION & HIGH EFFICIENCY

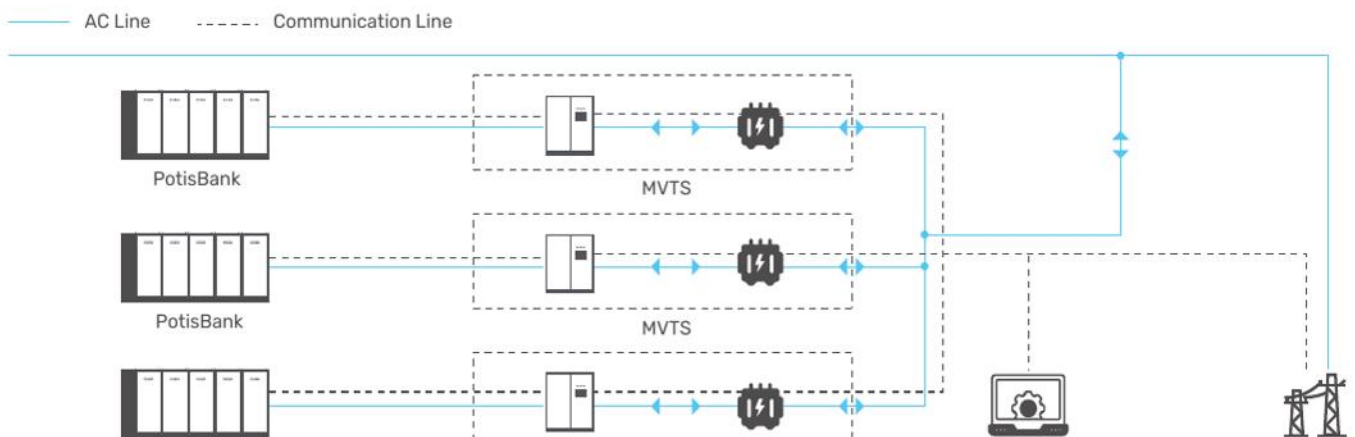
- Dual-ring redundant network for millisecond-level fault switching and gigabit data transmission
- TMS + EMS optimization cuts auxiliary energy use by 20%
- Enhanced system efficiency, boosting revenue by 8%-10%



COST-EFFECTIVE & STREAMLINED DEPLOYMENT

- EMS cloud-edge collaboration for remote management
- 10-year maintenance-free thermal system, reducing O&M labor by 40%
- AC-DC integrated, reducing construction by 50%, installation by 40%

System Diagram



Technical Data		PotisBank-L5.0-AC
DC Side		
Cell type	LFP	
System battery configuration	416S12P	
Nominal capacity	5015kWh	
Nominal voltage	1331.2V	
Operating voltage range	1164.8~1500VDC	
Nominal Charge/Discharge rate	0.5P	
Round Trip Efficiency	≥93%	
AC Side		
Rated output power	215kW*12	
Rated grid voltage	690V	
AC Output Type	3P3W	
Rated grid frequency	50/60Hz	
Max. THD of current	<3%	
Power factor range	-1~+1	
General Parameter		
Dimensions(W*D*H)	6058*2438*2896mm	
Weight	≈43t	
Degree of protection	IP55/Type 3R	
Anti-corrosion degree	C4/C5	
Operation humidity range	0%-95%, RH	
Operation temperature range	-30~+55℃	
Max. operating altitude	2000m	
Temperature control method	Intelligent Liquid Cooling	
Noise	≤75 db@1m	
Safety & Communication		
Fire suppression system	Smoke and heat, Detectors, FACP, Sprinkler, Fire alarm system Flammable gas detector NFPA 69, Compliance ventilation system Aerosol fire - extinguishing system (optional)	
Communication interface	Ethernet	
Communication protocol	Modbus TCP, IEC61850, IEC104	
Standard & Compliance		
Standard	IEC62619, IEC63056, IEC60529, IEC62477, UL9540A UL1973, UL9540, UL50E, NFPA855, NFPA69, UN38.5, UN3536	

*The specifications are subject to change without prior notice.