

# 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

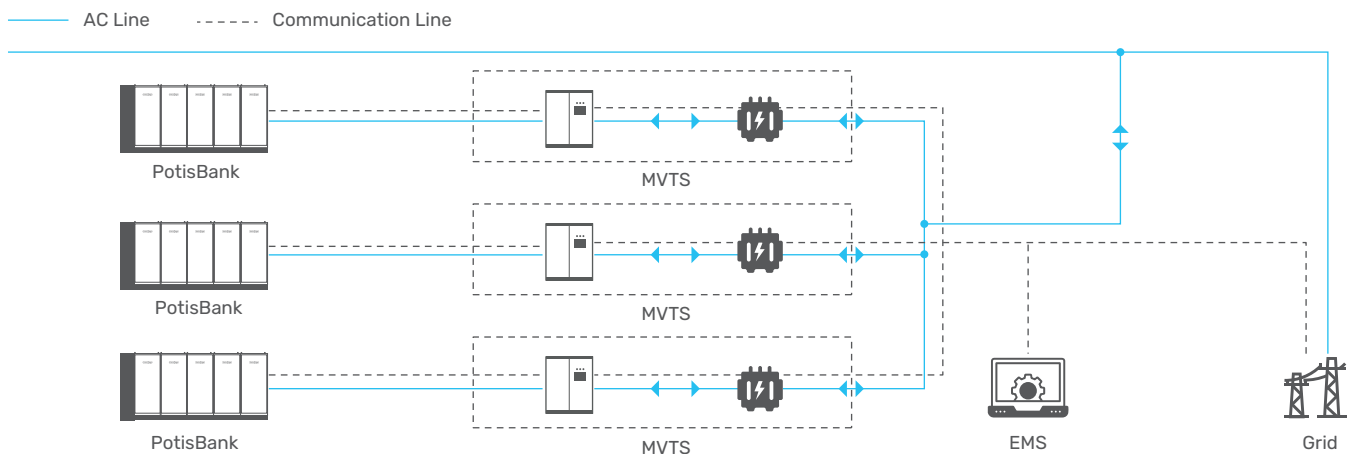
- Dual-ring redundant network for millisecond-level fault switching and gigabit data transmission
- TMS + EMS optimization cuts auxiliary energy use by 20%
- Enhanced system efficiency, boosting revenue by 8%-10%



### 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°C  |
| 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<br>Flammable gas detector NFPA 69, Compliance ventilation system<br>Aerosol fire - extinguishing system (optional) |
| Communication interface       |  | Ethernet   |
| Communication protocol        |  | Modbus TCP, IEC61850, IEC104   |
| Standard & Compliance         |  |  |
| Standard                      |  | IEC62619, IEC63056, IEC60529, IEC62477, UL9540A<br>UL1973, UL9540, UL50E, NFPA855, NFPA69, UN38.5, UN3536  |

\*The specifications are subject to change without prior notice.