UPS Energy Storage System Application

UPS Energy Storage System is an excellent energy source for UPS applications. Compared with normal batteries, the battery is characterized with high safety, high charge-discharge rate, high energy density, maintenance friendly and intelligentialize .

High Reliability: E2E safety/15y design; dual power supply : ACDC and DCDC ensure reliability; Anti floating charge protection; Charge and discharge circuit independent;

High Performance: High power rate; Long life span; High Environmental Adaptability; High efficiency;

Simple: Installment Friendly; Maintenance Friendly; Save 30% maintenance cost;

Intelligence: Three level intelligent management system; Intelligent operation and maintenance;

Super safe: State-of-the-art LFP cell; Reliable BMS design; Optional Module-level and cabinet-level fire protection systems.

*Total capacity, *Rated capacity	106.6 Ah, 104 Ah
*Total energy, *Rated energy	5.458 KWh*n, 5.324 KWh*n
Nominal voltage	51.2V*n
Operating voltage range	40V*n~57.6V*n
Max. charge current	26 A (0℃≤T<15℃) 104 A (15℃≤T<45℃) 26 A (45℃≤T<60℃)
Max. discharge power	26.88 kW*n (0℃≤T<65℃)
Peak charge current (@25℃)	122 A @5S
Peak discharge power (@25℃)	31.72 KW*n@5S
Dimension	600*1000*2000 mm
*Room Temperature Calendar Life (25°C±2℃)	15 years
*Room Temperature Cycle Life (25°C±2℃)	1000 cycles, ≥80%SOH @1C/6CP, 25℃
Operating ambient temperature	0℃~40℃
Optimal operating temperature	15℃~30℃
Operating ambient humidity	5%~95% RH, without condensation
Discharge rate of module	≤2%/month@25℃
Module series number	8~12S
Rack parallel number	Max. 8 Racks in parallel
Communication between UPS and battery system	Ethernet/RS485/CAN 2.0/Dry Contact Signal
Communication within battery system	CAN 2.0
Ingress Protection rate	IP20
Cooling	Natural cooling or air cooling (optional)
Altitude	≤4000m
Rack fire protection system	Optional, Perfluorhexone or Aerosol
Module fire protection system	Optional, Perfluorhexone or Aerosol
HMI screen	Optional
Certification	IEC62619/IEC62477/IEC62620/UL1973/UL9540A/ICC-ES AC156/EN61000-6-2 &EN61000-6-4/ UN38.3/PI965/RoHS/REACH
Package and transportation	Support transported separately or full rack

Note
RTE: Round-trip efficiency (RTE) – the ratio of discharge energy removed to regen energy returned during the profiles.
SOC: State of Charge (SOC) – the available capacity in a battery expressed as a percentage of rated capacity.
n: number of modules

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The specifications are subject to change without prior notice.
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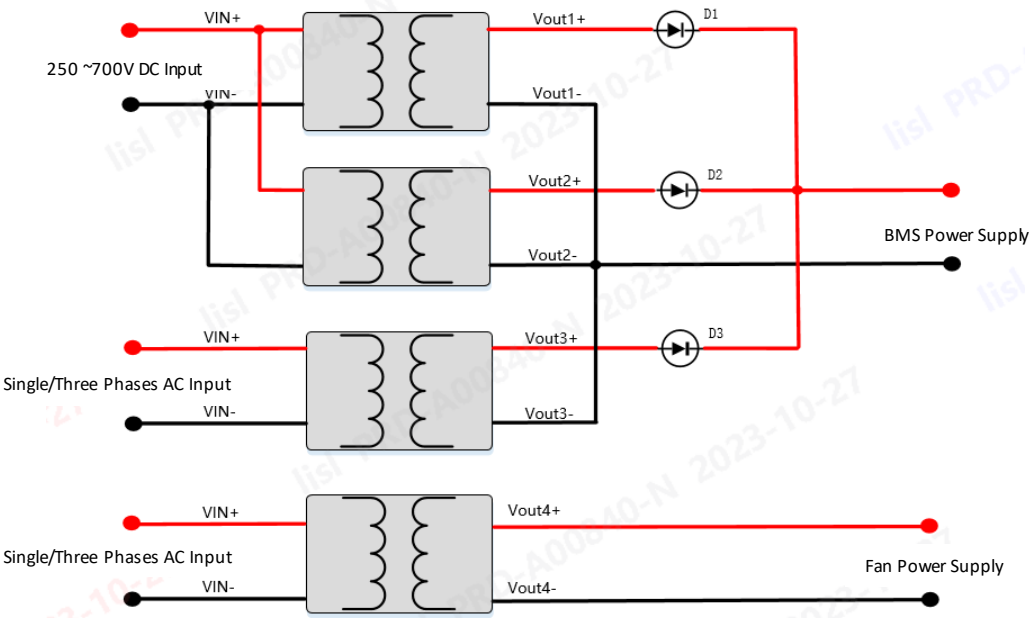
Dual Power Supply Utilization in UPS Energy Storage System Application

Independent ACDC and DCDC power supply redundancies deployed in UPS energy storage system application can significantly ensure the safety and reliability of system operation, to prevent single point of failure of battery management system power supply module.



Super safe: Independent dual power supply respectively from AC and DC enhances the reliability of BMS and reduces system failure probability.

RELIABILITY

High Reliability: Independent dual power supply couples with other electrical protection functions to provide safety against any potential contingencies.

DCDC Power Supply Specification	
Output Voltage	24V
Output Current	5A
Output Current Range	0~10A
ACDC Power Supply Specification – Supporting Single and Three Phases AC Input	
Output Voltage	24V
Output Current Range	0~20 A
Input Voltage	180~550 VAC