

150kWh Energy storage system

CE UE-150kWh

- BMS monitoring system
- Thermal management air conditioning system
- Heptafluoropropane automatic monitoring fire extinguishing system



1. Product description

The energy storage system consists of a 145.08KWh battery and a main control box, adopting air-cooled cooling method with BMU module. The voltage ranges from 405V to 591.3V and the dimensions of the cabinet are (W x D x H) 2265 x 1850 x 1050mm

2. Battery specifications

Cells

Nominal capacity (Ah)	280 Ah
Nominal Voltage (V) :	3.2
Working voltage (V)	2.5 - 3.65
Working temperature (°C)	-20 - +60
Storage temperature (°C)	-20 - +35
Weight (kg)	5.6
Energy density (Wh/kg)	110
Max charging current (A)	280
Max continuous discharging current (A)	280
Cycle life	≥6000

Module Specifications

No. Of cells in series	18
Working voltage (V)	45 - 65.7
Nominal capacity (kWh)	16.12

Pack Specifications

No. Of modules	9
Working voltage (V)	405 - 591.3
Nominal capacity (kWh)	145.08



3. PCS

Battery input data

Battery type	Li-Ion
Battery voltage range (V)	160 - 800
Max charging current (A)	50 + 50
Max discharging current (A)	50 + 50
Max charging/discharging power (W)	33 000
Number of battery input	2

PV string input data

Max DC input Power (W)	39 000
Max DC input voltage (V)	1000
Startup voltage (V)	180
MPPT range (V)	150-850
Full Load DC Voltage range (V)	360 - 850
Rated DC input voltage (V)	600
PV Input Current (A)	36 + 36 + 36
Max PV Isc (A)	55 + 55 + 55
No. of MPPT trackers	3
No. of strings per MPPT tracker	2 + 2 + 2

AC Output data

Rated AC Output and UPS power (W)	30 000
Max AC Output power (W)	33 000
Peak power (off grid)	1.5 time of rated power, 10s
AC Outout rated current (A)	45.5/43.5
Max AC current (A)	50/47.9
Max three-phase unbalanced output current (A)	60
Max continuous AC passthrough (A)	200
Power factor	0.8 leading to 0.8 lagging
Output frequency and voltage	50/60 Hz; 3L/N/PE, 220/380, 230/400 Vac
Grid type	Three phase
Total harmonic distorsion (THD)	<3%
DC current injection	<0.5% In

Efficiency

Max efficiency	97.60%
Euro efficiency	97.00%
MPPT efficiency	>99%



4. BMS specifications

Auxiliary working voltage (V) :	9 - 32 (Typical 24)
Auxiliary working voltage (mA) :	80
Total Voltage Sampling (V) :	50 - 1500
Total sampling accuracy	1%
Shunt Current Sampling (A)	-500 - 500
Shunt Current accuracy	0.5%
Analog input voltage range (V)	0 - 3.3
Digital input and output VIL (V)	0 - 0.5
Digital input and output VIH (V)	3 - PWR+
Digital input and output VOL (V)	0.04
Digital input and output VOH (V)	2.98 - 3.3
High side switch output (A)	1 - 4@100ms
Communication Specifications	
CAN communication baud rate	500 kbps
485 communication baud rate	57600 kbps
Working Environment	
Maximum Working Altitude (m)	4000
Maximum Working Humidity (%)	95
Working Temperature (°C)	-25 °C - 65 °C

