

# ST2782KWH-D1250HV +SG2500U

Storage System



## HIGH INTEGRATION

- DC coupled energy storage system integrated with PV inverter
- Advanced integration technology ensures optimal system performance and lower cost

## EFFICIENT AND FLEXIBLE

- Intelligent cell-level temperature control ensures higher efficiency and longer battery cycle life
- Modular design supports parallel connection and easy system expansion

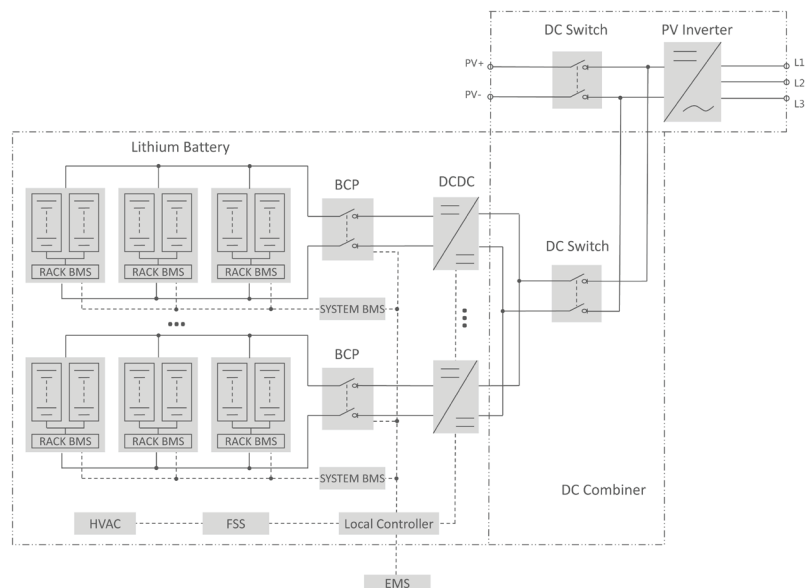
## SAFE AND RELIABLE

- DC electric circuit safety management includes fast breaking and anti-arc protection
- Multi-state monitoring and linkage actions ensure battery system safety

## SMART AND FRIENDLY

- Integrated local controller enables single point of communication interface
- Fast state monitoring and faults record enables pre-alarm and faults location.

## CIRCUIT DIAGRAM



System Type	ST2782KWH-D1250HV+SG2500U
<b>PV Data</b>	
Max. PV input voltage	1,500 V
MPPT voltage range for nominal power	800 – 1,300 V
Number of DC inputs	24
Max. PV input current	5,228 A
<b>Battery Data</b>	
Cell type	Samsung SDI Mega E3, 3.68 V / 100 Ah
Configuration of system	252S30P
Battery capacity (BOL)	2,782 kWh
Battery voltage range	806.4 – 1,045.8 V
<b>DCDC Data</b>	
Working voltage range	500 – 1,500 V
Nominal power	250 kW * 5
Max. current	344 A * 5
<b>AC Data</b>	
AC output power	2,750 kVA @ 45 °C (113 °F) / 2,500 kVA @ 50 °C (122 °F)
Max. AC output current	2,886 A
Nominal AC voltage	550 V
AC voltage range	484 – 605 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 – 65 Hz
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases	3 / 3
<b>General Data</b>	
Dimensions (W*H*D) of battery unit	12,192 * 2,896 * 2,438 mm / 480.0" * 114.0" * 96.0"
Weight (with / without battery) of battery unit	37 T / 16.5 T 81,571 lbs / 36,376 lbs
Dimensions (W*H*D) of PV Inverter	2,991 * 2,896 * 2,438 mm / 117.8" * 114.0" * 96.0"
Weight of PV Inverter	6.9 T / 15,211.9 lbs
Degree of protection	IP 54 / NEMA 3R
Operating temperature range	-30 to 50 °C / -22 to 122 °F
Relative humidity	0 – 95 % (non-condensing)
Max. working altitude	2,000 m / 6,562 ft
Cooling concept of battery chamber	Heating, Ventilation and Air Conditioning
Fire suppression system of battery unit	FM200 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP
Compliance	UL9540