

ST2740KWH-D1250HV +SG2500U

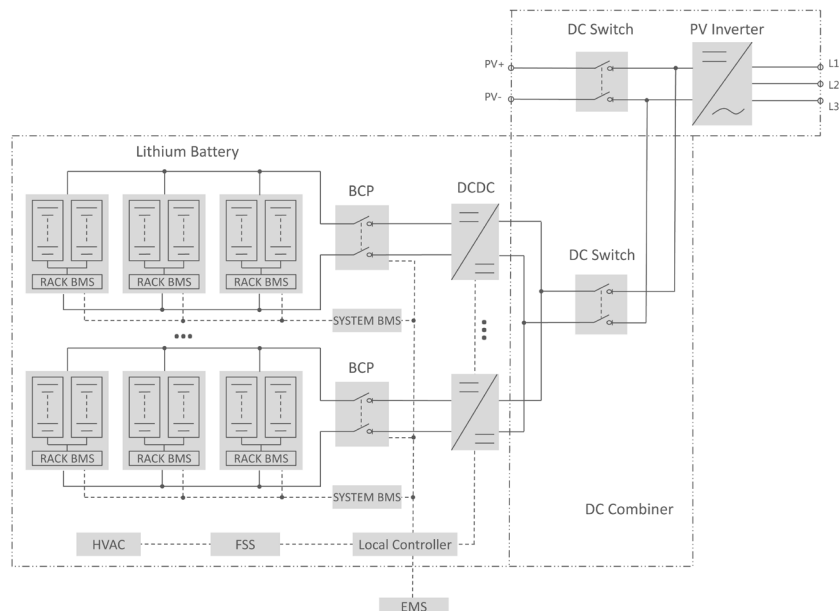
Storage System



SYSTEM FEATURES

- 1500V DC coupled PV+ESS system
- Compact mechanical design, minimized footprint
- High efficient system with safe and long lifecycle lithium-ion battery
- Integrated local controller, HVAC and FSS to enable unified communication and ensure system safety

CIRCUIT DIAGRAM



System Type	ST2740KWH-D1250HV+SG2500U
PV Data	
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
DCDC Data	
Cell type	Samsung SDI Mega E2, 3.68 V / 94 Ah
Configuration of system	264S30P
Battery capacity (BOL)	2740kWh
Battery voltage range	844 ~ 1,095 V
Battery Data	
Working voltage range	500 ~ 1,500 V
Nominal power	250 KW * 5
Max. current	344 A * 5
AC Data	
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
General Data	
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 unit	Heating, Ventilation and Air Conditioning
Fire suppression system of battery unit	FM-200 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP
Compliance	UL9540