

ST556KWH-250UD NEW

Energy Storage System



HIGH INTEGRATION

- Highly integrated ESS with outdoors cabinet design provides high protection class
- Advanced integration technology ensures optimal system performance and lower cost

EFFICIENT AND FLEXIBLE

- Top-mounted HVAC and cell-level temperature control ensures longer battery life cycle
- Modular design supports parallel connection and easy system expansion

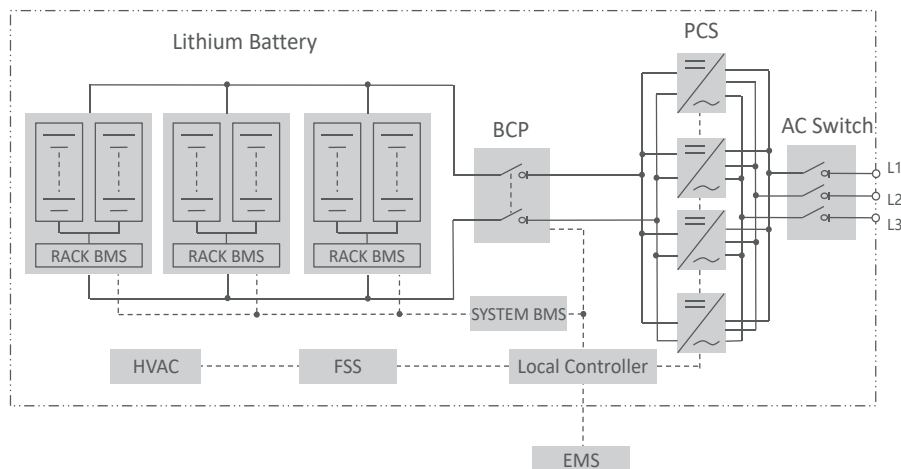
SAFE AND RELIABLE

- 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	ST556KWH-250UD
Battery Data	
Cell type	Samsung SDI Mega E3, 3.68 V / 100 Ah
Configuration of system	252S6P
Battery capacity (BOL)	556 kWh
Battery voltage range	806 ~ 1,046 V
BMS communication interfaces	RS485, Ethernet
BMS communication protocols	Modbus RTU, Modbus TCP
AC Data	
Nominal AC power	250 kVA
Max. AC power	264 kVA
Max.THDr of current	< 3 % (at nominal power)
DC component	< 0.5 % (at nominal power)
Nominal grid voltage	480 V
Grid voltage range	432 ~ 528 V
Power factor	> 0.99 (at nominal power)
Adjustable power factor	1 leading ~ 1 lagging
Nominal grid frequency	60 Hz
Grid frequency range	55 ~ 65 Hz
Isolation method	Transformerless
Nominal output voltage of off-grid	480 V
Max.THDr of off-grid output voltage	< 3 % (linear load)
General Data	
Dimensions (W * H * D)	4,600 * 2,400 * 1,000 mm / 181.1" * 94.5" * 39.4"
Weight (with / without battery)	5.7 T / 2.5 T 12,566 lbs / 5,511 lbs
Degree of protection	IP54 / NEMA 3R
Operating temperature range	-30 to 50 °C / -22 to 122 °F (> 45 °C / 113 °F derating)
Relative humidity	0 ~ 95 % (non-condensing)
Max. working altitude	3,000 m / 9,842 ft
Cooling concept of battery chamber	Heating, Ventilation and Air Conditioning
Cooling concept of PCS chamber	Temperature controlled forced air cooling
Fire suppression system of battery unit	FM200 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP, IEC 104
Certificates	UL9540, UL9540A, UL1973, UL1741+SA, IEEE 1547