

# ST5246KWH-2500U

Storage System

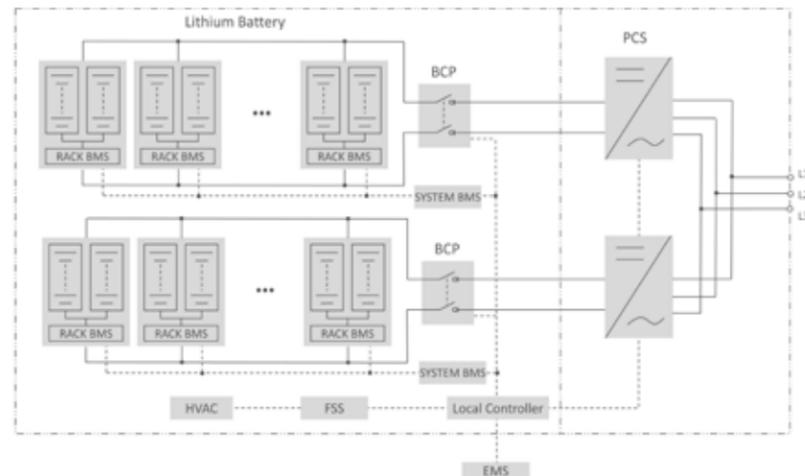
ST5246KWH-2500U



## SYSTEM FEATURES

- Highly integrated system with separate inverter and battery sections to allow flexible transportation and on-site installation
- Higher energy density system with Samsung latest E3 battery, higher efficiency and longer cycle life
- Integrated with local controller, HVAC and FSS to enable unified communication, ensure system safety and maximize system efficiency

## CIRCUIT DIAGRAM



System Type	ST5246KWH-2500U
<b>Battery Data</b>	
Cell type	Samsung SDI Mega E3, 3.68V/100Ah
Configuration of system	324S44P
Battery capacity (BOL)	5246 kWh
Battery voltage range	1037 ~ 1345 V
BMS communication interfaces	RS485, Ethernet
BMS communication protocols	Modbus RTU, Modbus TCP
<b>AC Data</b>	
Nominal AC power	2500 kVA
Max. AC power	2750 kVA
Max.THD of current	< 3 % (at nominal power)
DC component	< 0.5 % (at nominal power)
Nominal grid voltage	550 V
Grid voltage range	484 ~ 605 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	484 ~ 605 V
Max.THD of off-grid output voltage	< 3 % (linear load)
<b>General Data</b>	
Dimensions of PCS unit (W * H * D)	2,991 * 2,591 * 2,438 mm / 117.8" * 102.0" * 96.0"
Dimensions of battery unit (W * H * D)	12,192 * 2,896 * 2,438 mm / 480.0" * 114.0" * 96.0"
Weight of PCS unit	6.0 T / 13227.8 lbs
Weight of battery unit (with / without battery)	48.5 T / 16.2 T 106,924 lbs / 35,715 lbs
Degree of protection	IP54 / 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 / 6,561 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	FM-200 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP, IEC 104
Compliance	UL 9540, UL 9540A