ST2740KWH-2500HV
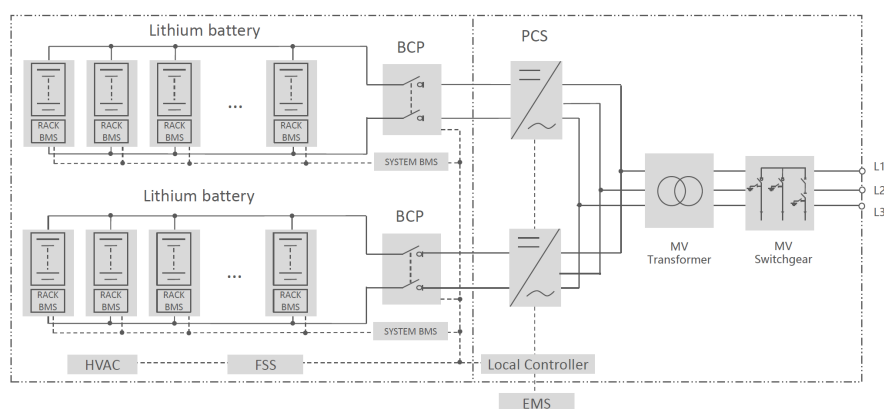
Storage System

SYSTEM FEATURES

- Highly integrated system with separate PCS and battery units
- Flexible system configuration for easy capacity expansion
- High efficiency system integrated with reliable lithium battery
- Integrated local controller to enable unified communication
- Integrated HVAC and FSS to ensure system safety and maximize system efficiency

CIRCUIT DIAGRAM

System Type	ST2740KWH-2500HV
Battery Data	
Cell type	Samsung SDI Mega M2F, 3.68V/94Ah
Configuration of system	264S30P
Battery capacity (BOL)	2,740 kWh
Battery voltage range	844 ~ 1,095 V
BMS communication interfaces	RS485, Ethernet
BMS communication protocols	Modbus RTU, Modbus TCP
AC Data	
Nominal AC power	2,500 kVA
Max. AC power	2,750 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 ~ 625 V
Power factor	> 0.99 (at nominal power)
Adjustable power factor	1 leading ~ 1 lagging
Nominal grid frequency	50 Hz
Grid frequency range	45 ~ 55 Hz
Isolation method	Transformerless
Nominal output voltage of off-grid	484 ~ 625 V
Max.THD of off-grid output voltage	< 3 % (linear load)
General Data	
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 / 13,227.8 lbs
Weight of battery unit (with / without battery)	36.0 T / 16.0 T 79,366 lbs / 35,274 lbs
Degree of protection	IP54
Operating temperature range	-30 to 50 ℃ / -22 to 122 ℉
Relative humidity	0 ~ 95 % (non-condensing)
Max. working altitude	4,000 m (> 2,000 m derating) 13,123 ft (> 6,561 ft derating)
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	Novec1230 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP, IEC 104
Certificates	TÜV