

ST5480KWH-5000HV-MV

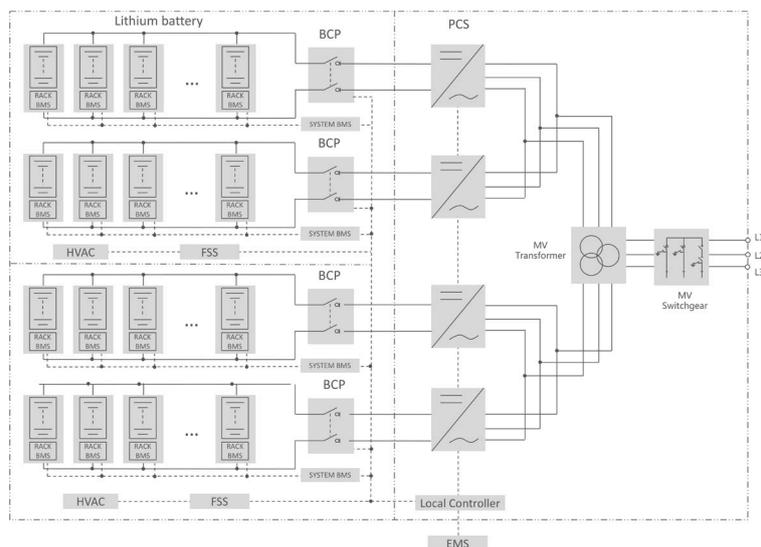
Storage System



SYSTEM FEATURES

- Highly integrated system including three standard 40ft containers for minimized labor
- High energy density system integrated with reliable lithium battery
- Integrated with MV transformer and MV switchgear in the system
- Integrated local controller to enable unified communication
- Integrated HVAC and FSS to ensure system safety and maximize system efficiency

CIRCUIT DIAGRAM



System Type	ST5480KWH-5000HV-MV
Battery Data	
Cell type	Samsung SDI Mega M2F, 3.68V/94Ah
Configuration of system	264S60P
Battery capacity (BOL)	5,480 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	5,000 kVA
Max. AC power	5,500 kVA
Max.TH.D of current	< 3 % (at nominal power)
DC component	< 0.5 % (at nominal power)
Isolation method	Transformer
AC voltage range	10 ~ 35 kV
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
Transformer	
Transformer rated power	5,000 kVA
Transformer max. power	5,500 kVA
LV/MV voltage	0.55 kV / 10 ~ 35 kV
Transformer vector	Dy1y1
Transformer cooling type	ONAN (Oil Natural Air Natural)
Oil type	Mineral oil (PCB free) or degradable oil on request
General Data	
Dimensions of PCS unit (W * H * D)	12,192 * 2,896 * 2,438 mm / 480.0" * 114.0" * 96.0"
Dimensions of battery unit (W * H * D)	2 * (12,192 * 2,896 * 2,438 mm / 480.0" * 114.0" * 96.0")
Weight of PCS unit (with MV transformer)	34.0 T / 75,957 lbs
Weight of battery unit (with / without battery)	2 * (36.0 T / 16.0 T 79,366 lbs / 35,274 lbs)
Degree of protection	IP54
Operating temperature range	-30 to 50 °C / -22 to 122 °F
Relative humidity	0 ~ 95 % (non-condensing)
Max. working altitude	1,000 m (standard) > 1,000 m (optional)
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
Compliance	TÜV

