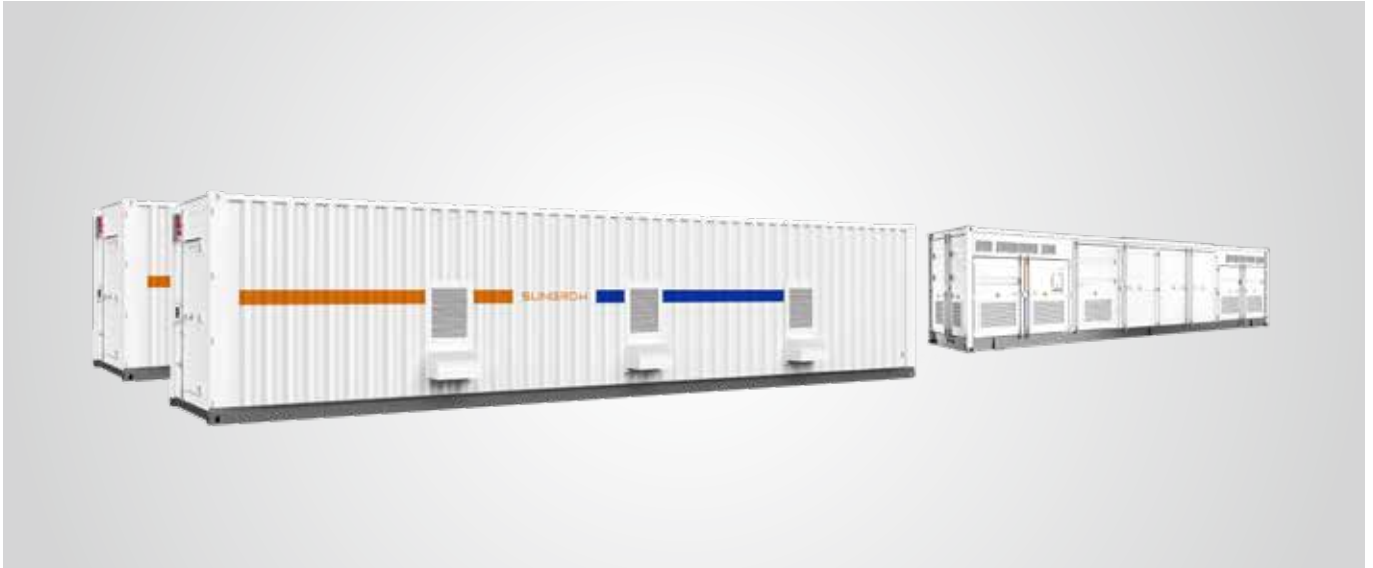


ST5480KWH-5000HV-MV

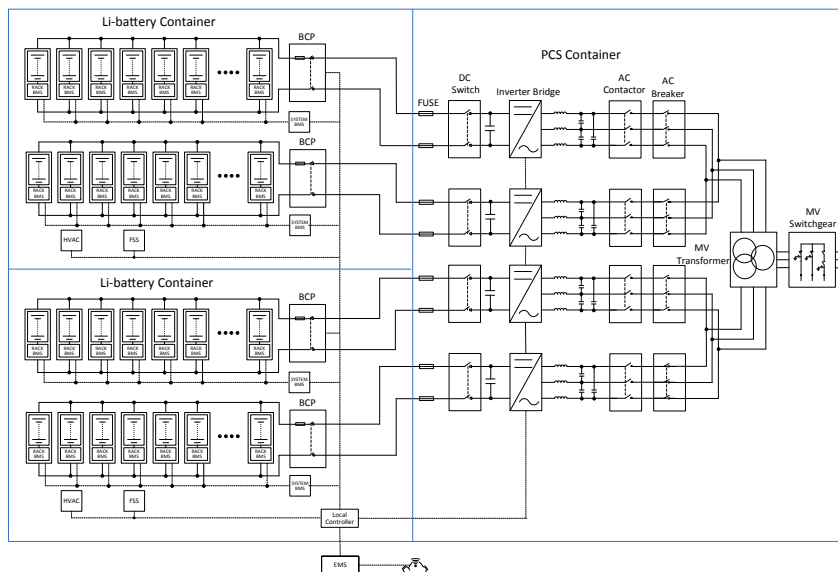
Storage System



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	Dy11
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 / NEMA 3R
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	FM-200 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP, IEC 104
Compliance	TÜV

