

An aerial photograph of a vast solar farm. Rows of blue solar panels stretch across a green field towards a line of trees and distant hills under a bright blue sky with scattered clouds. The sun is visible in the upper center, creating a lens flare effect.

BLUESUN 2WM/4.179MWH
ENERGY STORAGE SYSTEM



Mission

Enable green energy to create a zero-carbon ecology



Vision

To become a world-class leader in energy technology innovation



Value

Adhere to the right innovation practice and smooth

CHAPTER

01

Technical Proposal

02

Product Sepcification

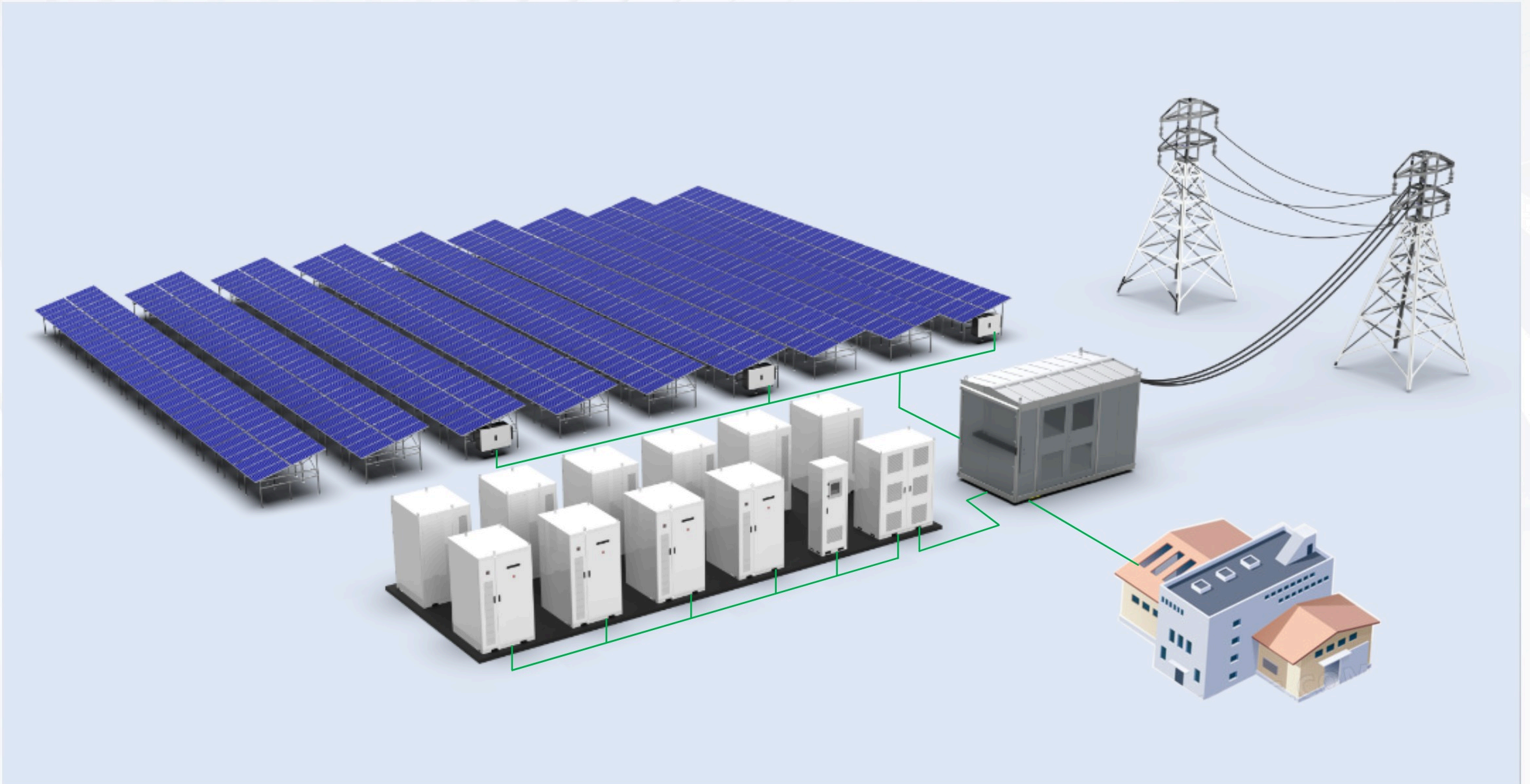
03

System function

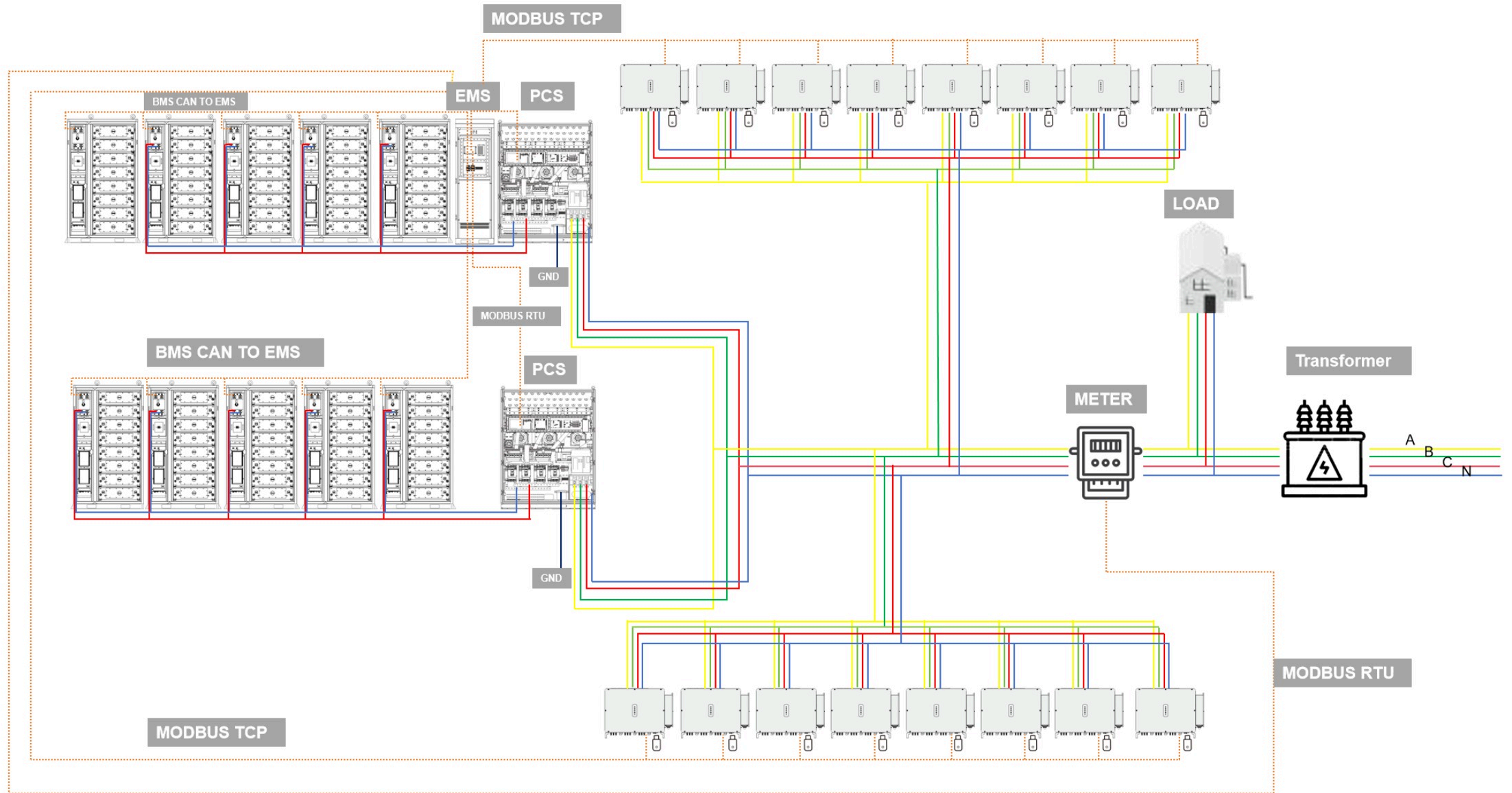
01 Main device List



Specification		Qty	Unit	Item
PV panel 610W solar panel	Half cell topcon	3276	piecess	
DC combiner box	12 lines in and 12 lines out	16	pieces	
Solar panel rack		1	set	
ON-grid string inverter 125KW		16	pieces	
418KWH energy storage system cabinet	166.4V 314AH lithium battery moudle including BMS	8	pieces	
	High voltage control box	1	piece	
	Liquid cooling machine	1	piece	
	Fire protection system	1	set	
EMS	Energy storage system	1	piece	
1000KW inverter	1000KW	2	pieces	



01 Schematic diagram

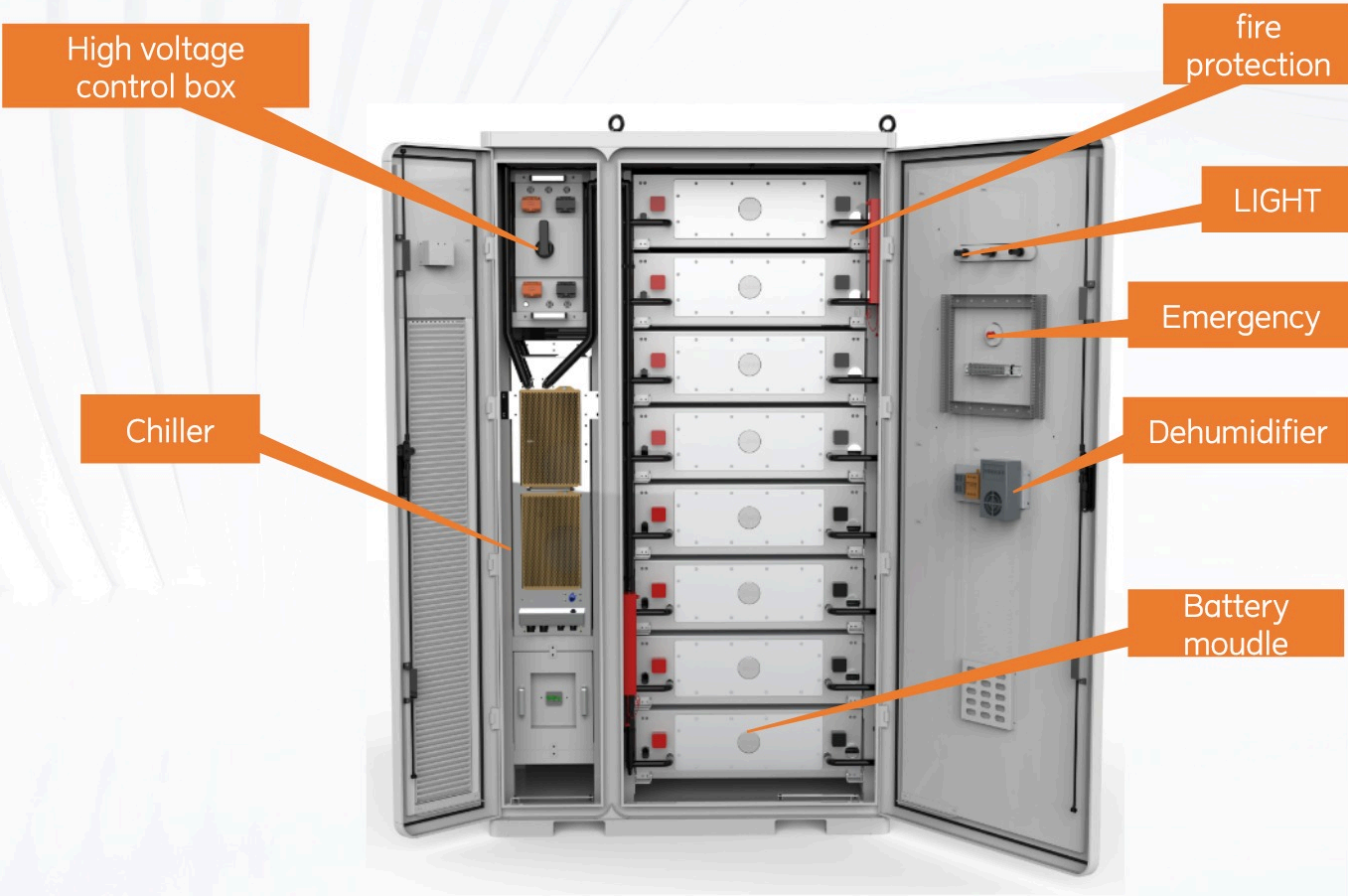


02-1 125KW ON-grid string inverter



Model	BSM125K-B	
Input(DC)	Max.DC Voltage	1100V
	Max.Input Current Per MPPT	40A
	Max.Short-circuit Current Per MPPT	60A
	Start Voltage	350V
	MPPT Voltage Range	200-1000V
	Nominal Voltage	650V
	Number of MPPT	8
	Strings Per MPPT	2
Output(AC)	Nominal AC Output Power	125KW
	Max. AC Output Power	125kVA
	Nominal AC Voltage	230V/400V,3W+PE,3W+N+PE
	AC Grid Frequency Range	50Hz / 60Hz(±5Hz)
	Max. Output Current	181.2A
	Power Factor(φ)	0.8leading-0.8lagging
	Max. Efficiency	98.7%
Efficiency	Euro Efficiency	98.3%
	Dimensions W x H x D	965mm*700mm*355mm
	Weight	85kg

02 417.9KWH LIQUID COOLING LITHIUM BATTERY



Battery Rack			
NO	Item		Specification
1	Configuration		1P8S
2	Rated Energy		417.9kWh
3	Rated Voltage		1331.2VDC
4	Voltage Range		1164.8~1497.6VDC
5	Charging Current	Rated	157A
		Maximum	314A
6	Discharging Current	Rated	157A
		Maximum	314A
7	Operating Ambient Temperature	Charge	0~50℃
		Discharge	-10~50℃
8	General Parameters	Size	1700mm(L)*1320 mm(W)*2371mm(H)
		Weight	3.2T
		IP Level	IP66
		Cooling mode	Liquid Cooling
		Communication agreement	CAN
		Power connection	Fast Plug
		Communication connection	Fast Plug
		AUX Power connection	Fast Plug
9	Standard requirement	Coolant	50% Ethylene glycol aqueous solution
		cell	UN38.3/CE
		rack	IEC62619

03 System Function

· PV absorption

Under the current situation, the installed capacity of photovoltaics in the region has reached saturation. During the peak period of photovoltaic power generation, it has an impact on the power grid. Therefore, it is necessary to equip with corresponding energy storage facilities to mitigate the instability of photovoltaic power generation. This set of systems can effectively absorb the electricity generated by photovoltaics during the peak period of photovoltaic power generation and supply power to users through energy storage during the peak period of electricity consumption.

· Peak Shaving and Valley Filling

The local power grid has different electricity prices corresponding to each time period. By using energy storage devices, the battery can be charged from the power grid when the electricity price is at a low stage. And when the electricity price rises to a high stage, the electricity stored in the battery can be discharged for the use of property owners. In this way, the property owners can benefit from the price difference of electricity



Making energy storage simple

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