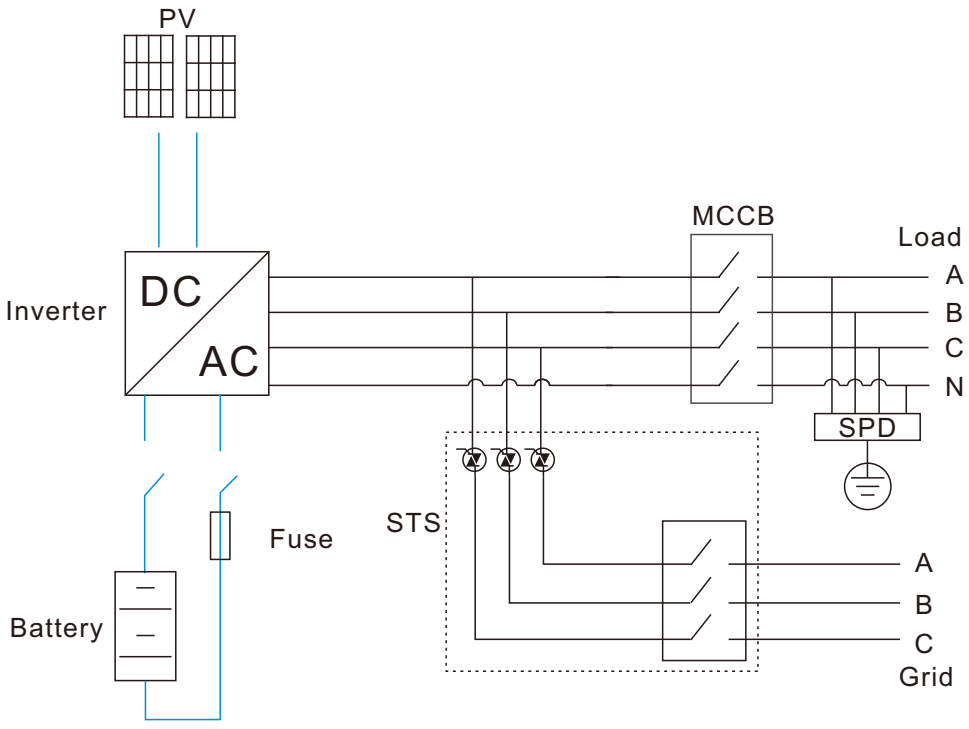
240kW/516kWh
PV + Hybrid Inverter BESS Solutions



The PV+Hybrid inverter BESS integrated liquid cooling battery pack, battery management system BMS, energy management system EMS, hybrid inverter and fire protection system. The system can be combined with photovoltaic power generation to form a grid-tied solar with energy storage system. Multiple systems can be connected in parallel for flexible expansion. The system is suitable for a variety of applications such as , on-grid/off-grid solar energy and storage system, backup power supply, and solar-diesel-microgrid system.

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Hybrid Inverter

PV Input	
Max. DC Voltage [V]	1100
Starting Voltage [V]	250
MPPT Voltage Range [V]l	250~1000
Fullload MPPT Voltage Range［V］	450~850
MPPT Max.Input Current [A]	65
MPPT Input Strings	5+5+5+5
No. of MPPT	4
Battery Input	
Max. DC Bus Voltage [V]	900
Max. DC Current [A]	220
DC Voltage Working Range [V]	600~900
DC Voltage Ripple Coefficient	2%
Rated Power［kW］	120
AC Output	
Max. Power Output [kW]	132
Reactive Power Range［kVA］	0~120
Rated Grid Voltage [V]	400
On-Grid Operation	
Allowable Grid Voltage [V]	304~440
Rated Grid Frequency [Hz]	50/60
THDi	3%
Power Factor	-1~1
Power Response [ms]	<20
Rated Output Voltage [V]	400
Off-Grid Operation	
Voltage Deviation	2%
Rated Output Frequency [Hz]	50

THDi	3%
General	
Ambient Temperature [°C]	-40~60
Relative Humidity	0~100%
Noise [dB]	59
Dimensions W*H*D [mm]	800*680*330
Weight [kg]	95
Ingress Protection	IP65
Cooling Method	Smart Air Cooling
Insulation Resistance	1MΩ
Communication Interface	Ethernet, RS485

Battery	
Nominal Capacity [Ah]	280
No. of Pack	6
Configurationt	1P288S
Rated Energy [kWh]	258
Rated Voltage [V]	921.6
Operating Voltage Range [V]	806~1036
Rated Charging/Discharging Power [kW]	129
Weight [kg]	2800
Dimensions D*W*H [mm]	1300*1300*2300
Operating Temperature [°C]	-20~55
Cooling Method	Liquid Cooling
Ingress Protection	IP66

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List of Equipment

NO.	Name	Recommended model/ Specifications	QTY	Remark
1	Hybrid Inverter	120kW, 4MPPT, 110% overloading	2	
2	Battery Cabinet	258kWh, 1P288S, 921.6V, Liquid cooling	2	
3	Switch Cabinet	-	1	
4	EMS	-	1	
5	PV Panels	Configured based on the capacity requirements	-	Customer's scope of supply

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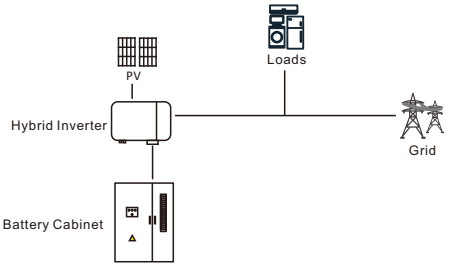
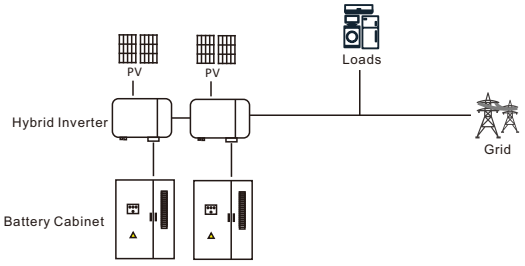
Grid-connected scenario

A grid-connected BESS offers the ability to capture and store electrical energy when the demand is low and provide electricity when the demand is high. This ability allows the business to operate more efficiently and sustainably.



Parallel connection scenario

The BESS connected in parallel allows for easier scalability, additional BESS can be added or removed without affecting the existing system. With the parallel connection, the system is able to have more flexibility in terms of system design and operation.



Microgrid scenario

Combining with solar or diesel generator, the system can become a local energy production and distribution network that can function independently when there is no access to grid.