

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 gridtied 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/offgrid solar energy and storage system, backup power supply, and solar-diesel-microgrid system.



## **Hybrid Inverter**

PV Input			
Max. DC Voltage [V]	1100		
Starting Voltage [V]	250		
MPPT Voltage Range [V]I	250~1000		
Fullload MPPT Voltage Range [V]	375~850		
MPPT Max.Input Current [A]	45		
MPPT Input Strings	3+3+3+3		
No. of MPPT	4		
Battery Input			
Max. DC Bus Voltage [V]	900		
Max. DC Current [A]	110		
DC Voltage Working Range [V]	600~900		
DC Voltage Ripple Coefficient	2%		
Rated Power [kW]	60		
AC Output			
Max. Power Output [kW]	66		
Reactive Power Range [kVA]	0~60		
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	1ΜΩ			
Communication Interface	Ethernet, RS485			
Battery				
Nominal Capacity [Ah]	150			
No. of Pack	11			
Configurationt	1P264S			
Rated Energy [kWh]	126.7			
Rated Voltage [V]	844.8			
Operating Voltage Range [V]	739.2~937.2			
Dimensions D*W*H [mm]	805*960*2303			
Charging/Discharging Temperature [°C]	20~30			
Cooling Method	Air Cooling			
Ingress Protection	IP20			



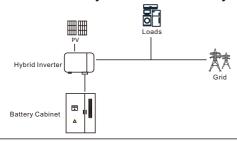
# List of Equipment

NO.	Name	Recommended model/ Specifications	QT Y	Remark
1	Hybrid Inverter	60kW, 4MPPT, 110% overloading	1	
2	Battery Cabinet	126.7kWh, 1P264S, 844.8V, Air cooling	1	
3	Switch Cabinet	-	1	
4	EMS	-	1	
5	PV Panels	Configured based on the capacity requirements	-	Customer's scope of supply



#### 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.

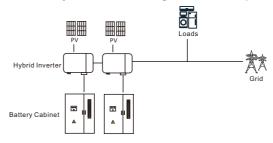






#### Parallel connection scenario

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.

