

ES On&Off Grid Hybrid Solar Inverter

Product Description

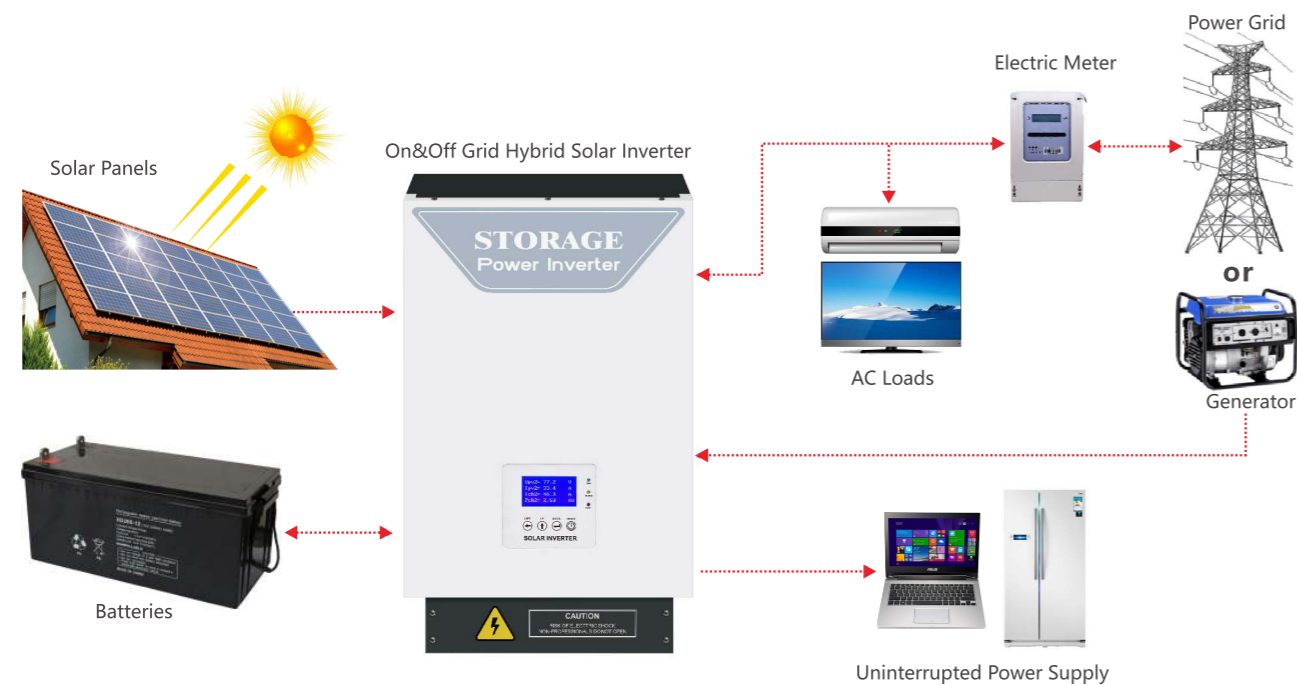
Solar On/Off grid energy storage inverter applied to solar energy storage micro-grid system, The system uses PV energy as priority. When the energy of PV is not enough, it can be supplemented by city power or batteries. When the PV energy is surplus, the battery is stored or accessed on the grid to maximize the utilization of PV power generation, so as to achieve the purpose of self-use and extra power consumption. In addition, according to different customer's requirements, peak and valley time periods can be set up to achieve peak-to-peak and valley-filling, reduce grid pressure, and maximize revenue. The system can compatible with lead-acid batteries and lithium batteries. In the event of a power grid failure, solar energy can continue to generate electricity and switch to off-grid mode to continue to supply power to the load.



Feature

- Integrated intelligent energy management system, a variety of modes can be set;
- Cut peaks and fill valleys to reduce grid pressure and maximize profits;
- Dual MPPT input, precise algorithm, efficient use of PV energy;
- 3-stage/2-stage charging technology to protect battery life;
- Two-way energy storage design, PV, mains can charge the battery;
- Support RS485 communication port/APP(Optional).

System Application Diagram



Technical Parameters

Model: ES		30248	50248	80296	10396	153192	203192	253240
PV Input	Max input voltage(Voc) (At the lowest temperature)	150V		300V		450V		500V
	MPPT tracking range	60V~120V		120V-240V		240V-360V		300V-400V
	Recommended operating voltage range	60V~80V		120V-160V		240V-320V		300V-380V
	MPPT route number	2						
	Max input power	1960W/1960W	3360W/3360W	5000W/5000W	6150W/6150W	8.8KW/8.8KW	11.2KW/11.2KW	14KW/14KW
Battery	Type of battery	Lead-acid battery / Lithium-ion battery						
	Rated voltage	48V		96V		192V	192V	240V
	Max charging current (Can be set,Recommended 0.1C)	70A(PV)/ 35A(Mains)	120A(PV)/ 60A(Mains)	100A(PV)/ 40A(Mains)	110A(PV)/ 60A(Mains)	80A(PV)/ 40A(Mains)	110A(PV)/ 60A(Mains)	110A(PV)/ 60A(Mains)
	Float voltage(Can be set)	55.2V		110.4V		220.8V		276V
	Charge voltage(Can be set)	56.8V		113.6V		227.2V		284V
	Charging method	3-stage/2-stage						
AC Input	Rated voltage	220V/230V						
	Input voltage range	187V~264V						
	Rated input frequency	43Hz~53Hz (50Hz) / 53Hz~63Hz (60Hz)						
	Islanding Protection	≤2S						
	Reconnection time	30S						
AC output (off grid mode)	Rated output power	3KW	5KW	8KW	10KW	15KW	20KW	25KW
	Rated output voltage	220V/230V						
	Output voltage accuracy	±2%						
	Rated output frequency	50Hz/60Hz						
	Output frequency accuracy	±1%						
AC output (on grid mode)	Rated output power	3KW	5KW	8KW	10KW	15KW	20KW	25KW
	Rated output current	13.6A	22.7A	36.4A	45.5A	68.2A	90.1A	113.6A
	Output voltage	187V~264V						
	Output frequency	47~52Hz/57~62Hz						
	Power Factor	> 0.99 (Rated power)						
Protection	Output short circuit	YES						
	Over load	YES						
	Over-voltage/under-voltage	YES						
	Over-frequency/under-frequency	YES						
	Over temperature	YES						
	Island protection	YES						
Regular Parameter	Topology	Transformer isolation						
	Display	LCD+LED						
	Operating temperature	-10°C~60°C (Derating above 45°C)						
	Storage temperature	-20°C~60°C						
	Noise	≤60dB						
	Relative humidity	0%~95%, No condensation						
	Highest altitude	2000m (Derating above 2000m)						
	Machine dimension(L*W*Hmm)	592*380*265		550*380*675		620*380*825		
	Package dimension(L*W*Hmm)	650*435*290		610*440*800		680*440*950		
	N.W.(Kg)	36	45	70	75	128	134	140
	G.W.(Kg)	40	49	80	85	140	146	152
Installation method	Wall-mounted			Tower				
Warranty	1 year							

Note: 1. Specifications are subject to change without prior notice; 2. Special voltage and power requirements can be customized according to the actual situation of users.