

# UP

## Bi-directional Battery Inverter

NEW



### • Features

- Built-in EMS achieves high efficient utilization of power energy between the grid and battery.
- Reservation mode allows users to set up time for charging and discharging (peak shaving function).
- Switch time <8 ms (to off grid mode) .
- Can be used in single /dual/ three phase grid structures.
- On-grid mode and off grid mode selectable .
- Max efficiency 95%, THD<5% under full load.
- Battery charging voltage and charging current programmable.
- Friendly HMI allows user configuration.

### • Applications



On&off-grid



Peak & Valley  
Reduction



Back-up power



## • Technical Parameter

### UP Series Bi-directional Battery Inverter/Charger

Model	UP 5048E	UP 6048E	General Data		
Battery			Display	LED+LCD	
Battery Type	Lead-acid or Lithium-ion		Communication	RS485/CAN	
Battery Voltage Range	40~60V		Dimensions (W*H*D)	370*531*168mm	
Max.Charge/Discharge Current	100A		Weight	16kg	
Charging Curve	3 Stages		Installation Style	Rack/Wall Mounted	
Charging Voltage	Depends On Battery Type(Schedule 1)		Topology	Transformer Isolation	
Output AC (Back Up)			Operating Temperature Range	-20~60℃（Derating Treatment Is Required If The Radiator Is Above 80℃）。	
Rated Output Power	5000W	6000W	Humidity	0%~95%Relative Humidity (No Condensation)	
Max.AC Output Power	5500W	6600W	Cooling	Intelligent Air Cooling	
Back Up Switch Time	<10ms		Protection Degree	IP20	
Rated output voltage	230V (Single Phase)		Max. operation altitude	2000m(>2000m Derating)	
Rated frequency	50Hz		Warranty	1Year	
Rated output current	22.7A	27.3A			
Input Voltage Waveform	Sine Wave				
THDv(@linear load)	2%				
No load loss	<50W				
Output AC(Grid side)			* Schedule 1: Battery type and charging voltage		
Rated Output Power	5000W	6000W	Battery Type	Boost/Vdc	Float/Vdc
Max. AC Output Power	5500W	6600W	Gel USA	56Vdc	54.8Vdc
Rated grid voltage	230V(177~267V/90~267V) (Single Phase)		AGM 1	56.4Vdc	53.6Vdc
Rated grid frequency	50Hz/60Hz (47Hz~55Hz/57Hz ~65Hz)		LiFePO4_LF14	57.6Vdc	54.4Vdc
Rated output current	22.7A	27.3A	MnNiCo_N14	54.8Vdc	54.8Vdc
Power Factor	>0.95		Custom	Set The Information According To The Specification Of The Battery	
THDi	<5%				
Efficiency					
Max.efficiency	95%				
Protection					
Anti islanding Protection	Integrated				
Insulation Resistor Detection	Integrated				
Output Over Current Protection	Integrated				
Output Over Voltage Protection	Integrated				
Over temperature protection	Integrated				
Surge protection	Integrated				

#### \* Schedule 1: Battery type and charging voltage

Battery Type	Boost/Vdc	Float/Vdc
Gel USA	56Vdc	54.8Vdc
AGM 1	56.4Vdc	53.6Vdc
LiFePO4_LF14	57.6Vdc	54.4Vdc
MnNiCo_N14	54.8Vdc	54.8Vdc
Custom	Set The Information According To The Specification Of The Battery	