

8. Technical parameters

Models	HF2420S40 -75	HF2420S60 -100	HF2430S40 -75	HF2430S60 -100	HF2420U60 -100	HF2430U60 -100
AC mode						
Rated input voltage	220/230Vac				110/120Vac	
Input voltage range	(170Vac~280Vac) $\pm 2\%$ (90Vac-280Vac) $\pm 2\%$				(90Vac-140Vac) $\pm 2\%$	
Frequency	50Hz/ 60Hz (Auto detection)					
Frequency Range	47 \pm 0.3Hz ~ 55 \pm 0.3Hz (50Hz); 57 \pm 0.3Hz ~ 65 \pm 0.3Hz (60Hz);					
Overload/short circuit protection	Circuit breaker					
Efficiency	>95%					
Conversion time (bypass and inverter)	10ms (typical)					
AC reverse protection	Available					
Maximum bypass overload current	30A				40A	
Inverter mode						
Output voltage waveform	Pure sine wave					
Rated output power (VA)	2000	2000	3000	3000	2000	3000
Rated output power (W)	2000	2000	3000	3000	2000	3000
Power factor	1					
Rated output voltage (Vac)	230Vac				120Vac	
Output voltage error	$\pm 5\%$					
Output frequency range (Hz)	50Hz \pm 0.3Hz 60Hz \pm 0.3Hz					

Maximum Efficiency	>92%					
Overload protection	For S model: (102% < load < 125%) ±10%: report error and turn off the output after 5 minutes; (125% < load < 150%) ± 10%: report error and turn off the output after 10 seconds; Load >150% ±10%: report error and turn off the output after 5 seconds;					
	For U model: (102% < load < 110%) ±10%: report error and turn off the output after 5 minutes; (110% < load < 125%) ± 10%: report error and turn off the output after 10 seconds; Load >125% ±10%: report error and turn off the output after 5 seconds;					
Peak power	4000VA	6000VA	3000VA	4500VA		
Loaded motor capability	1HP	2HP	1HP	2HP		
Rated battery input voltage	24V (Minimum starting voltage 22V)					
Battery voltage range	Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen)					
Power saving mode	Load ≤50W					
AC charging						
Battery type	Lead acid or lithium battery					
Maximum charge current(can be set)	0-60A	0-80A	0-40A			
Charge current error	± 5A _{dc}					
Charge voltage range	20-33V _{dc}					
Short circuit protection	Circuit breaker and blown fuse					
Circuit breaker specifications	30A			40A		
Overcharge protection	Alarm and turn off charging after 1 minute					
PV charging						
Maximum PV open circuit voltage	75V _{dc}	100V _{dc}	75V _{dc}	100V _{dc}	100V _{dc}	100V _{dc}
PV operating voltage range	30-75V _{dc}	30-100V _{dc}	30-75V _{dc}	30-100V _{dc}	30-100V _{dc}	30-100V _{dc}

MPPT voltage range	30-60Vdc	30-85Vdc	30-60Vdc	30-85Vdc	30-85Vdc	30-85Vdc
Battery voltage range	20 ~33Vdc					
Maximum output power	1000W	1400W	1000W	1400W	1400W	1400W
PV charging current range (can be set)	0-40A	0-60A	0-40A	0-60A	0-60A	0-60A
Charging short circuit protection	Blown fuse					
Wiring protection	Reverse polarity protection					
Hybrid charging Max charger current specifications (AC charger+PV charger)						
Max charger current(can be set)	0-100A	0-120A	0-120A	0-140A	0-100A	0-100A
Certified specifications						
Certification	CE(EN62109-1)				CE(EN62109-1)/ETL(UL 1741)	
EMC certification level	EN61000, C2					
Operating temperature range	-15°C to 55°C					
Storage temperature range	-25°C ~ 60°C					
Humidity range	5% to 95% (Conformal coating protection)					
Noise	≤60dB					
Heat dissipation	Forced air cooling, variable speed of fan					
Communication interface	USB/RS485(WiFi/GPRS)/Dry node control					
Size (L*W*D)	378mm*280mm*103mm					
Weight (kg)	6.2				6.8	