

SINE WAVE INVERTER



WHY YOU NEED AN INVERTER?

Independent electric energy systems are not adhered from the electrical utility grid. They vary in size from tiny yard lights to remote homes, villages, parks, and medical and military facilities. They also include mobile, portable, and emergency backup systems. Their common bond is the storage battery, which absorbs and releases energy in the form of direct current (DC) electricity. In contrast, the utility grid supplies you with alternating current (AC) electricity. AC is the standard form of electricity for anything that "plugs in" to utility power. DC flows in a single direction. AC alternates its direction many times per second. AC is used for grid service because it is more practical for long distance transmission. An inverter converts DC to AC, and also changes the voltage. In other words, it is a power adapter. It allows a battery-based system to run conventional appliances through conventional home wiring. There are ways to use DC directly, but for a modern lifestyle, you will need an inverter for the vast majority, if not all of your loads (loads are devices that use energy). Incidentally, there is another type of inverter called grid-interactive. It is used to feed solar (or other renewable) energy into a grid-connected home and to feed excess energy back into the utility grid. If such a system does not use batteries for backup storage, it is not independent from the grid, and is not within the scope of this article.



>>APPLICATIONS

- Heating Equipment
- Pumps
- Solars
- Home Office
- Camping
- Power Tools
- Move light at any place
- Audio/Video
- Portable Lighting
- Emergency power
- Small store on road





TECHNICAL SPECIFICATIONS



Model	clever			steady	
Capacity	500W	700W	1000W	1500W	2000W
Input voltage	175 – 265Vac				
Input frequency	50HZ ± 5HZ				
Inversion voltage	230VAC±10%				
Inversion frequency	50HZ ± 2%				
DC voltage	12Vdc	24Vdc		48Vdc	
Output waveform	Sine wave				
THD	≤ 3%				
Transfer time	≤4ms Automatic transfer				
Recharge current	Average charge current: 8A; Max charge current: 10A CPU controls automatic charge		Average charge current: 10A Max charge current: 18A CPU controls automatic charge		
Overload protection	Lock the machine automatically when overload over 100-120% for 25seconds; lock the machine automatically when overload over 120-200% for 1second; lock the machine automatically when Overload over 200% for 0.1 second				
Dimension (mm)	372*122*203		405*145*220		460*194*305
Weight (kg)	7.6	10.0	10.5	18.0	23.4
Battery count (12V)	1	2	2	2	4
Typical Backup time at full load	52 to 236 min.	75 to 337 min.	52 to 236 min.	35 to 157 min.	52 to 236min.
Capacity of battery	40Ah to 180Ah	40Ah to 180Ah	40Ah to 180Ah	40Ah to 180Ah	40Ah to 180Ah

Model	steady		force		might	
Capacity	2500W	3000W	3500W	4000W	7000W	10KW
Input voltage	175 – 265Vac					
Input frequency	50HZ ± 5HZ					
inversion voltage	230VAC±10%					
inversion frequency	50HZ ± 2%					
DC voltage	48Vdc			96Vdc		
Output waveform	Sine wave					
THD	≤ 3%					
Transfer time	≤4ms Automatic transfer					
Recharge current	Average charge current: 10A Max charge current: 18A CPU controls automatic charge					
Overload protection	Lock the machine automatically when overload over 100-120% for 25seconds; lock the machine automatically when overload over 120-200% for 1second; lock the machine automatically when Overload over 200% for 0.1 second					
Battery count (12V)	4	4	4	4	8	8
Typical Backup time at full load	42 to 189 min.	35 to 157 min.	30 to 135 min.	26 to 118 min.	30 to 135 min.	21 to 94 min.
Capacity of battery	40Ah to 180Ah	40Ah to 180Ah	40Ah to 180Ah	40Ah to 180Ah	40Ah to 180Ah	
Dimension (mm)	460*194*305			550*255*700		
Weight (kg)	28.0	33.4	33.4	39.8	75.0	86.0

