

# Atom Inverter

1200VA ~ 2400VA



The Modified Sine Wave Inverter is a DC-to-AC inverter with auto line-to-battery transfer and integrated charging system, serving as an extended-run UPS, a standalone power source or a home inverter as well. It supplies power from AC power and DC source. When AC cable is connected to a wall outlet, utility power goes to connected equipment and/or charges the batteries via the charging system. In battery mode, it automatically converts battery energy into AC power for backing up the connected devices.

## Features

- Automatic Line to Battery transfer
- Rack / Tower design, installation versatility
- Adjustable wider input voltage range and charging current
- Intelligent charging control, efficient charging
- Auto restart when mains power is restored
- Superior protection: low battery, overcharge, overload, overtemperature and short circuit
- High load-bearing capacity, supporting various household loads and IT equipment (< 50% half-wave load, < 30% inductive load)

## Technical specifications

MODEL	1200 VA	1500 VA	2400 VA
Capacity	720 W	900 W	1440 W
<b>AC INPUT</b>			
Rated voltage	220 / 230 / 240 Vac (selectable)		
Voltage range	220 V / 230 V / 240 Vac, -22% / -59% ~ +26%, ± 5 Vac (selectable)		
Rated frequency	50 Hz / 60 Hz (auto-sensing)		
Frequency range	± 10% (default), ± 5% ~ 15% (selectable)		
<b>OUTPUT</b>			
Power factor	0.6		
Output voltage	Battery mode: 220 V / 230 V / 240 Vac ± 10% (selectable) Mains mode: synchronized with utility power		
Output frequency	Battery mode: 50 Hz / 60 Hz ± 1% (selectable); Mains mode: synchronized with utility power		
Output waveform	Battery mode: square wave; Mains power mode: synchronized with utility power		
Inversion efficiency	≥ 83% (max.)		≥ 85% (max.)
IT equipment	Yes		
Half-wave load	≤ 50% (rated load)		
Inductive load	≤ 30% (rated load)		
<b>BATTERIES</b>			
Rated voltage	12 Vdc		24 Vdc
Charging current (Max.)	20 / 10 A ± 3 A (selectable)		15 / 10 A ± 3 A (selectable)
Equalizing charge voltage	Single battery 14.2 ± 0.3 Vdc (default), 13.6 ~ 15.0 Vdc (selectable)		
Floating charge voltage	Single battery 13.6 ± 0.3 Vdc		
Low voltage alarm	Single battery 10.8 ± 0.3 Vdc (default), 9.6 ~ 13.0 Vdc (selectable)		
Low voltage shutdown	Single battery 10.2 ± 0.3 Vdc (default), 9.6 ~ 12.0 Vdc (selectable)		
Overvoltage protection	Single battery 15.0 ± 0.3 Vdc		
Overvoltage recovery	Single battery 13.6 ± 0.3 Vdc		
<b>SYSTEM</b>			
Transfer time	≤ 8 ms (typical), ≤ 15 ms (max.)		
Protections	Overload, short circuit, over-temperature, output over/under-voltage <sup>®</sup> , excessive low battery		
Overload times (Mains mode)	≥ 110% for 120 s, ≥ 125% for 60 s, ≥ 150% for 10 s, ≥ 200% for 1 s		
Overload times (Battery mode)	≥ 110% for 60 s, ≥ 125% for 5 s, ≥ 150% for 1 s		
Communication interface	No		
Panel display	LCD + LED		
<b>OTHERS</b>			
Operating temperature	0 ~ 45°C		
Operating humidity	0 ~ 95% (no-condensing)		
Altitude	≤ 1000 m (Above 1000 m, derating 1% for each additional 100 m)		
IP rating	IP 20		
Cooling	Forced-air cooling		
Noise	< 45 dB		
Dimensions (W x D x H) (mm)	245 x 220 x 80		
Packaged dimensions (W x D x H) (mm)	315 x 290 x 156		
Net weight (kg)	2.66	2.68	2.82
Gross weight (kg)	3.02	3.04	3.18

<sup>®</sup>Note: "Selectable" can be customized according to customer requirements.