

ARES

Pure Sine Wave Inverter

300W ~ 3500W

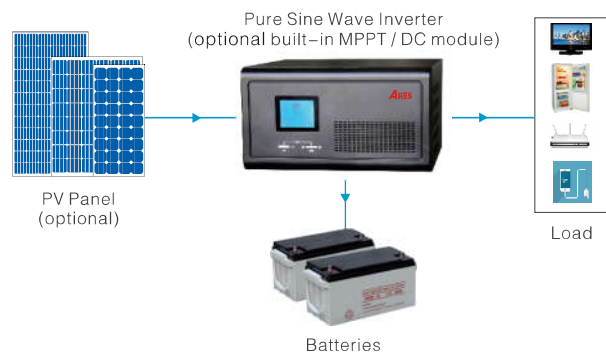


300W ~ 1600W



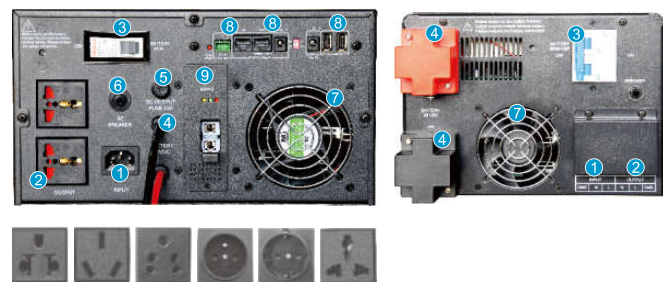
2500W ~ 3500W

The Pure Sine Wave Inverter is desirable long backup power solution for home and office appliances. It is not only an inverter but also contains a powerful intelligent charger. It provides pure sine wave power to all kinds of loads. And it can be used as UPS for computers as well.



Features

- DSP digital control technology
- Pure sine wave output
- Suitable for all kinds of loads, such as resistive, inductive and rectified loads and motors
- Use of pulse by pulse technology, improving load shock ability
- Charge current Max.60A. Settable charge current and charge voltage on front panel
- Settable no-load shutdown and energy saving mode
- Short circuit, overload and low battery protection
- Intelligent long backup time up to 10hrs (based on battery bank and loads)
- Compatible with generators, and matching of inverter and generator is settable.
- Unique functions: optional built-in MPPT module enables the inverter to work as off-grid solar inverter, optional DC module enables the inverter to apply to communications, router, switch, mobile charging, DC fans and illumination.



Rear Panel

- | | |
|--------------------|---------------------------|
| 1. Input | 6. AC Breaker |
| 2. Output | 7. Fan |
| 3. Battery Breaker | 8. DC Output (optional) |
| 4. Battery Input | 9. MPPT Module (optional) |
| 5. Fuse | |

Specifications

MODEL	AR0312 300W	AR0612 600W	AR1012 1000W	AR1624 1600W	AR2524 2500W	AR3524 3500W
DC INPUT						
Nominal input voltage	12 V			24 V		
DC input voltage range	10 V ~ 15 V			20 V ~ 30 V		
AC INPUT						
Bypass voltage	0 ~ 264 Vac for 220 Vac / 230 Vac / 240 Vac, 0 ~ 132 Vac for 100 Vac / 110 Vac / 115 Vac / 120 Vac					
AC voltage	150 ~ 282 Vac for 220 Vac, 156 ~ 294 Vac for 230 Vac, 163 ~ 307 Vac for 240 Vac, 68 ~ 128 Vac for 100 Vac, 75 ~ 141 Vac for 110 Vac, 79 ~ 148 Vac for 115 Vac, 82 ~ 154 Vac for 120 Vac					
Frequency	50 Hz / 60 Hz (auto-sense & settable: 5% ~ 15%, default 15%), 42.5 ~ 57.5 Hz for 50 Hz, 51 ~ 69 Hz for 60 Hz					
Input voltage of generator	99 ~ 282 Vac for 220 Vac, 104 ~ 294 Vac for 230 Vac, 108 ~ 307 Vac for 240 Vac, 45 ~ 128 Vac for 100 Vac, 50 ~ 141 Vac for 110 Vac, 52 ~ 148 Vac for 115 Vac, 54 ~ 154 Vac for 120 Vac					
Input frequency of generator	40 ~ 70 Hz					
Input power limitation	Rated power 10% ~ 150%, regulating step 10%, default 120%					
OUTPUT						
DC mode output voltage	220 Vac / 230 Vac / 240 Vac ± 5% or 100Vac / 110Vac / 115Vac / 120Vac ± 5% (settable)					
AC mode output voltage	174 ~ 242 Vac for 220 Vac, 182 ~ 253 Vac for 230 Vac, 190 ~ 264 Vac for 240 Vac, 79 ~ 109 Vac for 100 Vac, 87 ~ 121 Vac for 110 Vac, 93 ~ 125 Vac for 115 Vac, 95 ~ 133 Vac for 120 Vac					
Nominal output frequency	50 Hz / 60 Hz ± 0.3 Hz (auto-sense & settable)					
Output waveform	Pure sine wave					
Output power	300 W	600 W	1000 W	1600 W	2500 W	3500 W
Efficiency	Max. 95% (mains mode); Max. 80% (inverter mode)					
ECO mode	Settable, load < 3%, enter in 80 s					
No-load shutdown	Settable, time can be set (1 ~ 99 min), load can be set (3% ~ 50%)					
Transfer time	≤ 10 ms			≤ 15 ms		
Power factor	1.0					
THDV	< 5% (linear load)					
Inductive load	Yes					
Motor load	Yes					
Rectifier load	Yes					
Overload	Mains mode: 110% for 120 s, 125% for 60 s, 150% for 10 s (switch to bypass) Inverter mode: 110% for 60 s, 125% for 10 s, 150% for 10 s (shut down)					
BATTERIES						
Charging current (selectable)	Default 10 A	Default 20 A, regulating step 1 A (< 10 A) / 5 A (> 10 A)				
	Max. 15 A	Max. 30 A	Max. 40 A	Max. 40 A	Max. 50 A	Max. 60 A
Equalizing charge voltage	Single battery 14.4 Vdc (default), 13.6 ~ 15 Vdc adjustable					
Floating charge voltage	Single battery 13.7 Vdc (default), 13.2 ~ 14.6 Vdc adjustable					
Charge mode	3 stage charge mode					
DOD	Single battery 10.8 Vdc (default), 9.6 ~ 13 Vdc settable					
EOD	Single battery 10.2 Vdc (default), 9.6 ~ 11.5 Vdc adjustable					
Reverse warning	Buzzer					
MPPT MODULES (OPTIONAL)						
Model	10 A / 20 A / 30 A / 40 A				/	
Max. PV input voltage (Voc)	40 V			60 V		/
PV optimum operating voltage (Vmp)	18 V ~ 32 V			29 V ~ 48 V		/
Max. PV power	120 W / 240 W / 360 W / 480 W			240 W / 480 W / 720 W / 960 W		/
DC MODULES (OPTIONAL)						
Model	5 V (2 A), 9 V / 12 V (1 A), 15 V / 24 V (1 A), 12 V / 24 V (10 A)					
OTHERS						
Protections	Overload – short-circuit – overvoltage – undervoltage – overcharge – overtemperature – excessive low battery					
Human-machine interface	LCD & BUZZER					
Operating temperature	0°C ~ 40°C					
Operating humidity	Relative humidity ≤ 93%					
Net weight (kg)	8.0/8.5/7.4	10.9/11.4/11	14.0/14.6	18.0/18.5	32.0	36.0
Gross weight (kg)	9.0/9.5/8.4	11.9/12.4/12	15.0/15.6	19.0/19.5	34.0	38.0
Dimensions (W × D × H) (mm)	280 × 258 × 120 (w/o option) 293 × 280 × 160 (w/ option) 400 × 210 × 127 (Wall mounted)		293 × 280 × 160		302 × 479 × 209	
Packaged dimensions (W × D × H) (mm)	330 × 352 × 200 (w/o option) 370 × 355 × 235 (w/ option) 490 × 290 × 195 (Wall mounted)		370 × 355 × 235		353 × 582 × 287	