

ARES

AR900PT

Built-in transformer

Online 1kVA ~ 3kVA



Features

- Single / single-phase models with on-line double conversion technology for 208/220/230/240Vac grid system
- DSP (Digital Signal Processors) technology
- High input power factor closes to 1
- Low harmonic current, high energy efficient
- Wide input voltage range & auto sensing 50/60 Hz frequency
- Frequency conversion mode: 50Hz input / 60Hz output or 60Hz input / 50Hz output
- Auto power ON/OFF, auto-switch to bypass at light load
- Support ECO mode and system efficiency up to 97%
- Output power factor 0.9
- Linear derating in low voltage input, stronger carrying capacity
- Advanced battery management (ABM)
- Powerful battery charger with rapid and stable charging technology
- Fan speed varies intelligently with temperature, reducing noise and increasing its service life
- Cold start and mains start function
- Effective software and hardware protection function
- Standard configuration with output isolation transformer
- Advanced communications: RS232 and USB ports (standard), SNMP, dry contacts and RS485 (optional)

Specifications

MODEL	AR901PT	AR901PTH	AR902PT	AR902PTH	AR903PT	AR903PTH	
Capacity	1 KVA / 900 W		2 KVA / 1800 W		3 KVA / 2700 W		
INPUT							
Rated input voltage	208 / 220 / 230 / 240 Vac						
Rated input frequency	50 / 60 Hz (auto-sense)						
Input voltage range	110 ~ 176 Vac (power derating linearly between 50% and 100% load), 176 ~ 280 Vac (no derating), 280 ~ 300 Vac (power derating 50%)						
Input frequency range	40 ~ 70 Hz ± 0.1 Hz						
PFC	≥ 0.99						
THDI	≤ 6%						
Bypass voltage range	-25% ~ +15% (settable)						
OUTPUT							
Output voltage	208 / 220 / 230 / 240 Vac (settable)						
Voltage accuracy	± 1%						
Output frequency	Line mode: Same as input frequency, BAT mode: 50 / 60 Hz ± 0.1 Hz						
Output PF	0.9						
THD	≤ 3% (linear load); ≤ 6% (non-linear load)						
Load crest	3 : 1						
Inverter overload capability	105% ~ 125% for 1 min, 125% ~ 150% for 30 s, > 150% for 300 ms						
Transfer time	Mains mode to BAT mode: 0 ms Inverter mode to bypass mode: ≤ 4 ms						
BATTERIES							
DC voltage	36 V	36 V	72 V	72 V	72 V	96 V	96 V
Inbuilt battery	12 V / 7.0 Ah	N / A	12 V / 7.0 Ah	N / A	12V/9.0Ah	12V/7.0Ah	N / A
Battery quantity	3	3	6	6	6	8	8
Recharging time	Recover 90% capacity in 3 hours for standard models						
Charging current (Max.)	Standard model: 1A Long time model: 6 A / 3 A						
EFFICIENCY							
Line mode	84%		86%		88%		
BAT mode	80%		82%		84%		
ECO mode	89%		91%		93%		
OTHERS							
Communications	RS232, USB (Standard), SNMP, dry contacts (Optional)						
Protections	Over-temperature, fan testing, overload, short circuit, battery discharge						
Operating humidity	0 ~ 90 % RH @ 0 ~ 40° C (non-condensing)						
Storage temperature	-25° C ~ 55° C (excluding batteries)						
Operating altitude	≤ 1000 m, above 1000 m, derate 1% for each rising 100 m						
IP rating	IP 20						
Noise level	≤ 55 dBA (at 1m)						
Dimensions (mm) W × D × H	191*410*350			191*456*530			
Weight (kg)	26	18	45	32	54	60	40

- Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208Vac.
- All specifications subject to change without notice.
- Custom-made specifications are acceptable.