

AR900 Pro

10 kVA ~ 30 kVA

(3:3)

PF 0.9



Features

- DSP digital control technology
 - Active power factor correction (APFC), input power factor up to 0.99
 - Output power factor 0.9
 - Cold start
 - Dual input
 - Wide input voltage range (190 V ~ 485 V)
 - Auto sensing frequency
 - 50 / 60 Hz frequency conversion mode
 - Work efficiency up to 98% in ECO mode
 - Auto control fan speed when loads varies
 - Auto power ON/OFF according to the load capacity set by users
 - Flexible battery configuration for using 14/16/18/20 pcs batteries
 - Compact internal layout, miniaturized the complete unit for small footprint
 - LCD+LED display, multi-functional keys operation, friendly human-machine interface
 - Powerful background software for parameters configuration and online updating
- Doubling the battery charging speed, 90% capacity restored in 4 hours (standard model UPS)
 - Linear derating in low voltage input, reducing battery discharging times, extending the service life of battery
 - Advanced battery management (ABM), automatic floating / equalizing charge control, charger dormancy control
 - Configurable switching time from battery mode to mains mode when mains power is restored, reducing the impact on power grid or generator
 - Effective software and hardware protection function, powerful self-diagnostic function, abundant historical records
 - Standard emergency power off (EPO)
 - Standard maintenance bypass
 - Standard RS232 / USB communication port
 - Optional RS485 / SNMP / AS400 communication port and SMS alarms
 - Optional N+X redundancy parallel up to 6 units
 - Optional battery temperature compensation, EMD environmental sensors

Rear Panel

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Optional 5" colorful touch screen display

1. Mains Input
 2. DC Input
 3. Bypass Input
 4. Output
 5. Mains Input Breaker
 6. Bypass Input Breaker
 7. Maintenance Bypass
 8. Fan
 9. RS232
 10. USB
 11. EPO
 12. Battery Temperature Compensation (Optional)
 13. Intelligent Slot 1 (SNMP / AS400 / RS485 Optional)
 14. Intelligent Slot 2 (Optional)
 15. Parallel Card (optional)
 16. Battery Breaker



Specifications

MODEL	AR9010P	AR9015P	AR9020P	AR9030P
Capacity	10 kVA / 9 kW	15 kVA / 13.5 kW	20 kVA / 18 kW	30 kVA / 27 kW
INPUT				
Rated voltage	360 / 380 / 400 / 415 Vac			
Voltage range	277 ~ 485 Vac (no derating); 190 ~ 277 Vac (linear derating between 50% and 100% load)			
Rated frequency	50 / 60 Hz (auto-sense)			
Frequency range	40 ~ 70 Hz			
Power factor	≥ 0.99			
Bypass voltage range	– 40% ~ + 15% (settable)			
Total harmonic distortion (THDi)	≤ 5%			
OUTPUT				
Rated Voltage	360 / 380 / 400 / 415 Vac (settable)			
Voltage regulation	± 1%			
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)			
Waveform	Sinusoidal			
Power Factor	0.9			
Total harmonic distortion (THDv)	≤ 2% (linear load), ≤ 5% (non-linear load)			
Crest factor	3:1			
Overload (Inverter)	102% ~ 125% for 10 min, 125% ~ 150% for 1 min, > 150% for 0.5 s			
Overload (Bypass)	102% ~ 125% for 20 min, 125% ~ 150% for 2 min, > 150% for 1 s			
BATTERIES				
DC voltage	Standard model: 240 Vdc; Long time model: 192 Vdc (168 / 192 / 216 / 240V optional)			
Inbuilt battery of standard model	20 × 7 Ah	40 × 7 Ah	40 × 9 Ah	60 × 9 Ah
Charging current	Long time model: 7 A supplied (additional 7 A is optional) Standard model: 1 A, 2 A, 3.5 A settable			
Recharge time	Standard model: 90% capacity restored in 4 hours; Long time model: depend on the capacity of battery			
SYSTEM				
Efficiency	≥ 93%, ECO mode 98%			
Transfer time	0 ms			
Max. number of parallel connections	6			
Protections	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage and fan failure			
Communications	RS232 / USB (standard), RS485 / dry contacts / SNMP (optional)			
Display	LCD+LED			
Standards	EN 62040–1, EN 62040–2, EN 61000–3–12, EN 61000–3–2, EN 61000–3–11, IEC 61000–4–2, IEC 61000–4–3, IEC 61000–4–4, IEC 61000–4–5, IEC 61000–4–6, IEC 61000–4–8, IEC 61000–4–11, IEC 61000–2–2			
OTHERS				
Operating temperature	0°C ~ 40°C			
Storage temperature	–25°C ~ 55°C (without batteries)			
Relative humidity	0 ~ 95% (non-condensing)			
Altitude	≤ 1000 m, derating 1% for each additional 100 m			
IP rating	IP 20			
Noise level at 1 m	≤ 60 dB	≤ 65 dB		
Online thermal dissipation	3504 BTU/hr	5773 BTU/hr	8281 BTU/hr	9929 BTU/hr
Dimensions (W × D × H) (mm)	350 × 655 × 732 (H)			
	350 × 785 × 858 (S)	350 × 785 × 1078 (S)		
Packaged dimensions (W × D × H) (mm)	472 × 780 × 920 (H)			
	472 × 910 × 1050 (S)	472 × 910 × 1260 (S)		
Net weight (kg)	55 (H), 115 (S)	60 (H), 155 (S)	61 (H), 175 (S)	65 (H), 235 (S)
Gross weight (kg)	65 (H), 125 (S)	70 (H), 170 (S)	71 (H), 190 (S)	75 (H), 250 (S)

- Derate capacity to 90% when the output voltage is adjusted to 360 Vac.
 - S means standard model, H means long time model.
- All specifications subject are to change without notice.
 - Custom-made specifications are acceptable.