

TRUE ONLINE UPS

AP9100S

1 kVA ~ 3 kVA

PF 0.9

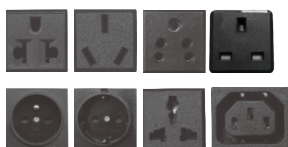


Features

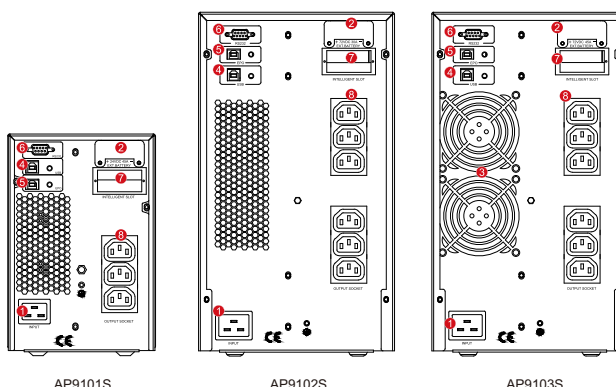
- High frequency on-line double conversion technology
- DSP (Digital signal processing) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110 V ~ 300 Vac) and frequency range (40 ~ 70 Hz)
- Auto sensing frequency
- 50 / 60 Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 4h (standard model UPS)
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)
- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, and 12 A charger (2/3 kVA only)

Rear Panel

1. AC input socket
2. Battery connector (Optional)
3. Fan
4. USB
5. EPO (Optional)
6. RS232
7. Intelligent slot (Optional)
8. Output sockets



Optional outlets



AP9101S

AP9102S

AP9103S

Specifications

MODEL	AP9101S	AP9102S	AP9103S	
Capacity	1 kVA / 900 W	2 kVA / 1800 W	3 kVA / 2700 W	
INPUT				
Rated voltage	208 / 220 / 230 / 240 Vac			
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)			
Frequency	40 ~ 70 Hz (auto-sensing)			
Power factor	≥ 0.99			
Bypass voltage range	- 25% ~ +15% (settable)			
Total harmonic distortion (THDi)	≤ 6%			
OUTPUT				
Voltage	208 / 220 / 230 / 240 Vac (settable via LCD)			
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	105% ~ 125% for 1 min, 125% ~ 150% for 30 s, > 150% for 300 ms			
BATTERIES				
DC voltage	36 V	72 V	72 V	96 V
Inbuilt battery	3 x 12V7Ah	6 x 12V7Ah	6 x 12V9Ah	8 x 12V7Ah
Charging current (max.)	1 A	1 A	1 A	1 A
Recharge time	Standard model: 90% capacity restored in 3 hours; Long time model: depend on the capacity of battery			
SYSTEM				
Efficiency	≥ 90% (Mains mode)	≥ 91% (Mains mode)	≥ 92% (Mains mode)	
	≥ 85% (Battery mode)	≥ 86% (Battery mode)	≥ 87% (Battery mode)	
	≥ 95% (ECO mode)	≥ 96% (ECO mode)	≥ 97% (ECO mode)	
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)			
Protections	Short-circuit, overload, overtemperature, battery discharge protection and fan testing protection			
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)			
Display	LCD + LED			
Standards	EN 62040-1, EN 62040-2, EN 61000-3-2, EN 61000-3-3, 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, IEC 62040-2, IEC 62040-1, IEC 62040-3			
OTHERS				
Operating temperature	0℃ ~ 40℃			
Storage temperature	-25℃ ~ 55℃ (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 1m	≤ 50 dB			
Dimensions (W×D×H) (mm)	144 x 317 x 216	191 x 419 x 335	191 x 419 x 335	
Packaged dimensions (W×D×H) (mm)	230 x 460 x 315	277 x 500 x 435	277 x 500 x 435	
Net weight (kg)	12.8	23.1	24.3	29.4
Gross weight (kg)	14	24.7	25.9	31.1

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