

Features

- Advanced DSP and 3-level technology
- Output power factor 1.0
- Active power factor correction (APFC), input power factor up to 0.99
- High efficiency 95% (up to 98% in ECO mode)
- Advanced digital parallel technology
- Wide input voltage range (110 ~ 288 Vac) and frequency range (40 ~ 70 Hz)
- 50 / 60 Hz frequency auto sensing
- Two modes of frequency conversion: 50 Hz input / 60 Hz output or 60 Hz input / 50 Hz output
- Dual-input design, supporting independent bypass
- Flexible battery configuration (settable 16 - 20 pcs batteries)
- Digitally controlled charger
- High charging current available (Max. 12 A)
- Charging voltage and current configured by demands
- Linear derating in low voltage input reducing battery discharging times, extending the service life of battery
- Intelligent battery management, automatic floating / equalizing charge control, charger dormancy control, increasing battery life by 50%
- Ability to switch on the UPS with batteries
- Settable delayed start time when mains power is restored, reducing the impact on power grid or generator
- Fan speed varies intelligently with temperature, reducing noise and extending its service life
- Equipped with self-aging function
- Compact internal layout, miniaturized the complete unit for small footprint
- Powerful background software for parameters configuration
- Advanced multi-platform communications: RS232, USB, RS485, SNMP and dry contacts communication interfaces
- Effective software and hardware protection function, robust self-diagnostic function, and abundant event log for check

Available Options

- RS232 and smart card slot included
- Optional parallel function, battery temperature compensation, SNMP card, USB, RS485 card, dry contacts, EMD, and SMS alarms



MODEL	SPM9106		SPM9110	
Capacity	6 kVA / 6000 W		10 kVA / 10000 W	
Input wiring	Single-phase three-wire (1Φ + N + PE)			
Rated voltage	208 / 220 / 230 / 240 Vac			
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 288 Vac (no derating)			
Rated frequency	50 / 60 Hz (auto-sensing)			
Frequency range	40 ~ 70 Hz			
Power factor	≥ 0.99			
Bypass voltage range	- 40% ~ +15% (settable)			
Total harmonic distortion (THDi)	≤ 5%			
OUTPUT				
Output wiring	Single-phase three-wire (1Φ + N + PE)			
Rated voltage	208 (PF=0.9) / 220 / 230 / 240 Vac			
Voltage regulation	± 1%			
Frequency	Synchronized to bypass in mains mode; 50 / 60 Hz ± 0.1% Hz in battery mode			
Waveform	Sinusoidal			
Power factor	1			
Total harmonic distortion (THDv)	≤ 1% (linear load); ≤ 4% (non-linear load)			
Total harmonic distortion (THDv)	3:1			
Bypass voltage range	105% ~ 110% for 10 min, 110% ~ 125% for 1 min,126% ~ 150% for 30 s			
BATTERIES				
DC voltage	192 Vdc (192 ~ 240 Vdc settable)			
Number of battery	16 pcs (16 ~ 20 settable)			
Inbuilt battery (standard model)	12 V / 7 Ah × 16		12 V / 9 Ah × 16	
Charging current	Standard model: 1 A; Long time model: 5 A (default),1 ~ 5 A settable; 12 A (optional)			
Recharge time	Standard model: 90% capacity restored in 8 hours; Long time model: depend on the capacity of battery			
SYSTEM				
Efficiency	≥ 94% at 100% load, max. 95% at 60% load, ≥ 98% in ECO mode			
Transfer time	0 ms			
Protections	Short-circuit, overload, overtemperature, battery low voltage, overvoltage, undervoltage and fan failure			
Max. number of parallel connections	RS232 (standard), USB / RS485 / dry contacts / SNMP / battery temperature compensation (optional)			
Display	LCD + LED			
OTHERS				
Operating temperature	0°C ~ 40°C			
Storage temperature	-25°C ~ 55°C (without battery)			
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	≤ 55 dB		≤ 58 dB	
Dimensions (W × D × H) (mm)	191 × 465 × 711 (S), 191 × 465 × 350 (H)		191 × 495 × 711 (S), 191 × 495 × 350 (H)	
Packaged dimensions (W × D × H) (mm)	310 × 654 × 941 (S), 318 × 595 × 475 (H)		310 × 685 × 941 (S), 318 × 617 × 475 (H)	
Net weight (kg)	53 (S), 14.5 (H)		62 (S), 16.5 (H)	
Gross weight (kg)	61 (S), 16 (H)		70 (S), 18 (H)	