

SM Series

Online UPS 1kVA to 10kVA
1-Phase Input; 1-Phase Output



TYPICAL APPLICATIONS



Telecom



Local Area Network



E-Business



Servers



Cash Registers



Security

Real VFI / double conversion online technology suitable for safe supply application-critical consumers in the IT environment such as workstations, servers, storage systems, as well as in the area of sensitive switching and control systems.

The multilingual graphical LCD display provides all the important operating states and values that can be stored and retrieved in addition to real-time data storage in plain text.

GREEN POWER

Input power factor up to 0.996, Low THDi (< 5%), decrease the pollution to city power. Compliance with RoHS standard, innocuous and environmental friendly.

Design in accordance to International EMC and Safety standard.

SAVE YOUR MONEY

AC/AC efficiency up to 94%, electric bill saved equals to one new UPS in 2 years.

Output power factor up to 1.0, load capability increases by 30% than common UPS.

Intelligent fan speed management, help to decrease operating cost.

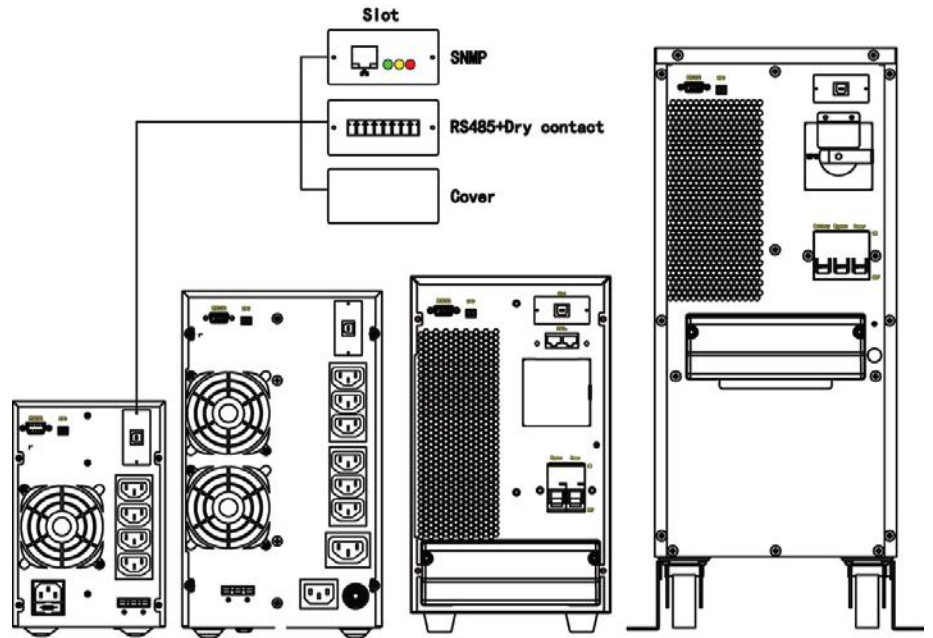
MAIN CHARACTERISTICS

- VFI topology (online / double conversion) protection against all mains network problems.
- Extremely wide input voltage window of 120 VAC to 295 VAC without stress on the internal battery system and with a stable output voltage.
- ECO and frequency operating voltage possible
- Expansion slot for SNMP, potential free contacts, remote display
- Graphic LCD display with interactive multilingual user interface

MODEL	SM1000	SM2000	SM3000
Power Ratings (KW)	1000 VA	2000 VA	3000 VA
UPS INPUT			
Input Voltage	208/220/230/240 VAC		
Voltage range without battery mode	120 - 295 VAC		
Frequency (Auto Selection)	50/60 ± 10% (50/60 Hz auto-sensing)		
Power Factor	≥ 0.99		
THDi	< 5%		
UPS OUTPUT			
Output Voltage	208/220/230/240 VAC (Adjustable)		
Frequency (Hz)	50/60 Hz ± 0.1 (Battery Mode)		
Power Factor	0.9 (1.0 Optional)		
THDv	THD < 2% (Linear Load) , < 5% (Nonlinear Load)		
Voltage Waveform	Pure Sine Wave		
Transfer Time	0 ms (Without Interruption)		
Efficiency	94.2%	94.6%	94.2%
Overload	101 % - 115 % for 1 Min. , 116 % - 133 % for 1 Sec. , above 134 % for 200 ms		
Crest Factor	3 : 1		
Short Circuit Response	Short circuit proof (3 x In for 100 ms)		
BATTERY			
Type	Sealed Lead Acid maintenance - free .		
Voltage (VDC)	24	48	72
Battery Size	2x12v 9AH	4x12v 9AH	6x12v 9AH
Charger Current (A) Max.	1 , (4 Optional)	1 , (4 Optional)	1 , (4 Optional)
Charging time (to 90 %)	5 h		
Battery Management	Exhaustive discharge protection / Protection against excess load Automatic battery test (daily, weekly, monthly)		
COMMUNICATION			
Communication Interface	RS232+USB (RS485, Dry contact and SNMP optional)		
User interface / failure indication	3 LED's with traffic light display, detailed indication via LCD display (acoustic/visual) (alarms: at mains failure, overload, battery charging, battery replacement, fan fault data logger – with clear text display incl. Date and time history)		
PROTECTION / ALARM			
Protection	Low battery, overload, short-circuit and over temperature		
Alarms	Low battery, abnormal AC input, UPS failure		
GENERAL DATA			
Audible Noise (1 m distance)	< 50	< 55	
Operation Temperature	-5 to 40 °C		
Relative Humidity	0 to 95% No Condensation		
Operation Altitude	Up to 1000 m @ nominal load		
Dimension (WxDxH) mm	145x360x225	190x400x330	
Weight (Kg)	9.2	17.7	22.9

MODEL	SM6000	SM10000
Power Ratings	6000 VA	10000 VA
UPS INPUT		
Input Voltage	208/220/230/240 VAC	
Voltage range without battery mode	120 - 295 VAC	
Frequency (Auto Selection)	50/60 ± 10% (50/60 Hz auto-sensing)	
Power Factor	≥ 0.99	
THDi	< 5%	
UPS OUTPUT		
Output Voltage	208/220/230/240 VAC (Adjustable)	
Frequency (Hz)	50/60 Hz ± 0.1 (Battery Mode)	
Power Factor	0.9 (1.0 Optional)	
THDv	THD < 1% (Linear Load) , < 4% (Nonlinear Load)	
Voltage Waveform	Pure Sine Wave	
Transfer Time	0 ms (Without Interruption)	
Efficiency	95%	95%
Overload	101 % - 115 % for 1 Min. , 116 % - 133 % for 1 Sec. , above 134 % for 200 ms	
Crest Factor	3 : 1	
Short Circuit Response	Short circuit proof (3 x In for 100 ms)	
BATTERY		
Type	Sealed Lead Acid maintenance - free .	
Voltage (VDC)	192	192
Battery Size	16x12v 7AH	16x12v 7AH
Charger Current (A) Max.	1~8(Adjustable)	1~8(Adjustable)
Charging time h (to 90%)	5	
Battery Management	Exhaustive discharge protection / Protection against excess load Automatic battery test (daily, weekly, monthly)	
COMMUNICATION		
Communication Interface	RS232+USB (RS485, Dry contact and SNMP optional)	
User interface / failure indication	3 LED's with traffic light display, detailed indication via LCD display (acoustic/visual) (alarms: at mains failure, overload, battery charging, battery replacement, fan fault data logger – with clear text display incl. Date and time history)	
PROTECTION / ALARM		
Protection	Low battery, overload, short-circuit and over temperature	
Alarms	Low battery, abnormal AC input, UPS failure	
GENERAL DATA		
Audible Noise dB (1 m distance)	< 55	
Operation Temperature °C	-5 to 40	
Relative Humidity	0 to 95% No Condensation	
Operation Altitude	Up to 1000 m @ nominal load	
Dimension (WxDxH) mm	230x502x553	
Weight (Kg)	54.5	56.2

AVAILABLE SOCKET



CONFORMITY



SATRON Power Solutions
Approach your local SATRON Power Solutions
representative for further support.
Contact details can be found on:
www.satronpower.com