

SPM9930M - MODULAR UPS (3 Phase In / 3 Phase Out)

25kVA ~ 200kVA

PF 1.0

Features

- Advanced dual-core DSP control technology
- True On-line, double conversion power protection, and with strong load capacity
- Compact footprint, modular Hot-swappable design simplifying maintenance and scalability
- High efficiency up to 96% in on-line mode, 99% efficiency in ECO mode
- Dual input design, independent bypass available, improving bypass availability
- Output power factor 1.0, input power factor ≥ 0.99 , input THDi $\leq 3\%$, output THDv $\leq 1\%$
- 138 ~ 485 Vac wide input voltage range, 50 Hz / 60 Hz grid self-adaptive
- Frequency conversion available: 50 Hz input / 60 Hz output or 60 Hz input / 50 Hz output
- Advanced digital parallel technology, improving redundancy and reliability in system
- Flexible charger parameter and battery configuration settings, battery number 30 ~ 46 pcs selectable
- Compatible with lead-acid battery and lithium battery, suitable for different types of battery configuration requirements
- Support cold start with battery and auto restart with mains power
- Settable delay time for startup when the mains power is restored, reducing the impact on the grid or generators
- Fan speed varies intelligently with temperature, reducing noise and extending the service life of the fan
- Fault-tolerant design for fan system, taking 35% loads when any one of fans fails
- Superior hardware and software protection function, robust self-diagnostic function, and abundant event log
- Hibernation function to improve the system efficiency at light loads and extend the service life of UPS
- Powerful background software for parameters configuration and online updating
- 7 inches LCD touch screen, friendly human-machine interface
- Multi-platform communications: RS485, CAN, NET, dry contacts, SNMP, Wi-Fi and GPRS communication interfaces; Real-time monitoring UPS available through the mobile App after installing Wi-Fi card and GPRS card
- Intelligent battery management, automatic floating/equalizing charge control, battery self-diagnosis control, SOC detection, SOH detection and charger hibernation control, extending battery lifespan





Power Module



- 1 Run indicator
- 2 Alarm indicator
- 3 Fault indicator
- 4 Ready switch
- 5 Output port
- 6 Input port

Dimensions (W x D x H) (mm)	442 x 620 x 86
Weight (kg)	20.26
Charging current	10 A
Capacity	25 kVA / 25 kW
Power density	17.2 W / inch ³

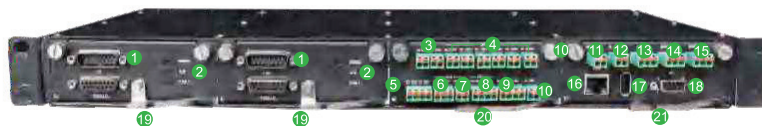
Bypass Module



- 1 Run indicator
- 2 Alarm indicator
- 3 Fault indicator
- 4 Ready switch
- 5 Output port
- 6 Input port

Dimensions (W x D x H) (mm)	442 x 500 x 130
Weight (kg)	18
Capacity	200 kVA / 200 kW

Control Module



- 1 LBS connection port/rack parallel port
- 2 LED indicator
- 3 Input dry contacts
- 4 Output dry contacts
- 5 Better Ground faults (BTG) interface / Generator (GEN) interface
- 6 Generator (GEN) port
- 7 Battery circuit breaker (BCB) port
- 8 LBS connection port / rack parallel port
- 9 Switch state port of distribution cabinet
- 10 SPD port
- 11 Ambient temp port
- 12 Battery temp compensation port
- 13 CAN port
- 14 R485 port 1
- 15 R485 port 2
- 16 Ethernet port
- 17 USB port
- 18 LCD port
- 19 Plug-in switch of system control boards
- 20 Plug-in switch of dry contacts board
- 21 Plug-in switch of monitoring board

Specifications

MODEL	SPM993100M	SPM993200M
Rated capacity	100 kVA / 100 kW	200 kVA / 200 kW
Number of power module	4	8
Rated capacity of power module	25 kVA / 25 kW	
INPUT		
Input wiring	Three-phase five-wire (3Φ + N + PE)	
Rated voltage	380 Vac / 400 Vac / 415 Vac	
Voltage range	138 ~ 305 Vac (linear derating at 40% ~ 100% load), 305 ~ 485 Vac (no derating)	
Frequency range	40 ~ 70 Hz	
Input power factor	≥ 0.99	
THDi	≤ 3%	
Bypass input voltage range	-60% ~ +25% (settable)	
Battery voltage	± 240 Vdc (±180 ~ ± 276 Vdc settable)	
Number of battery	40 pcs 12 V batteries (30, 32, 34, 36, 38, 40 42, 44, 46 pcs settable)	
OUTPUT		
Output wiring	Three-phase five-wire (3Φ + N + PE)	
Rated voltage	380 Vac / 400 Vac / 415 Vac	
Output voltage regulation accuracy	± 1%	
Output frequency accuracy	Synchronized with utility in mains power mode; 50 Hz / 60 Hz ± 0.1% in battery mode	
Output power factor	1	
Output waveform distortion (THDv)	≤ 1% (linear load); ≤ 4% (non-linear load)	
Crest factor	3:1	
Overload capacity	105% < load ≤ 110% for 60 min, 110% < load ≤ 125% for 10 min, 125% < load ≤ 150% for 1 min, load > 150% for 0.2 s	
SYSTEM		
Max. efficiency	96% in on-line mode, 99% in ECO mode	
Transfer time	0 ms	
Max. number of parallel connections	2	
Protections	Short-circuit, overload, over-temperature, battery low voltage, undervoltage, overvoltage, fan failure protection	
Communications	Standard configurations: RS485, CAN, NET, SNMP, dry contacts port, and EPO Optional configurations: Wi-Fi card, parallel port, LBS port, GPRS card, Battery temperature sensor, EMD and SMS alarm	
Display	7 inches LCD touch screen	
ENVIRONMENTAL		
Operating temperature	0°C ~ 40°C	
Storage temperature	-25°C ~ +55°C (without battery)	
Relative humidity	0% ~ 95% (non-condensing)	
Altitude	≤ 1000 m, above 1000 m, derating 1% for each additional 100 m	
Protection level	IP 20	
Noise	≤ 65 dB (at 1 m)	
OTHERS		
Cabinet dimensions (W x D x H) (mm)	600 x 850 x 1200	600 x 850 x 2000
Cabinet weight (kg)	180	280
Altitude	≤ 1000 m, above 1000 m, derating 1% for each additional 100 m	
Protection level	IP 20	
Noise	≤ 65 dB (at 1 m)	

* All specifications are subject to change without notice