



# MS SERIES MODULAR

25-600kVA  
(380V/400V/415V)



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The MS series modular UPS provides the most compact footprint of less than 2m<sup>2</sup> with maximum capacity of 900kVA. With best reliability and high performance, it has been leading the domestic market for years.

MS series is considered to be the best power protection solution for large data centers, as well as for sensitive electronics.



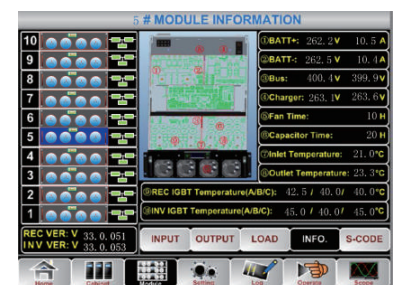
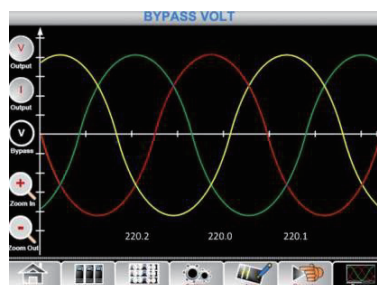
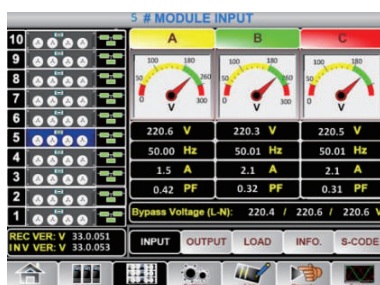
## Independent LCD for Each Power Module

Each power module has an independent LCD, gives users' direct overview of status data and alarms in real time.



## • Friendly Interface

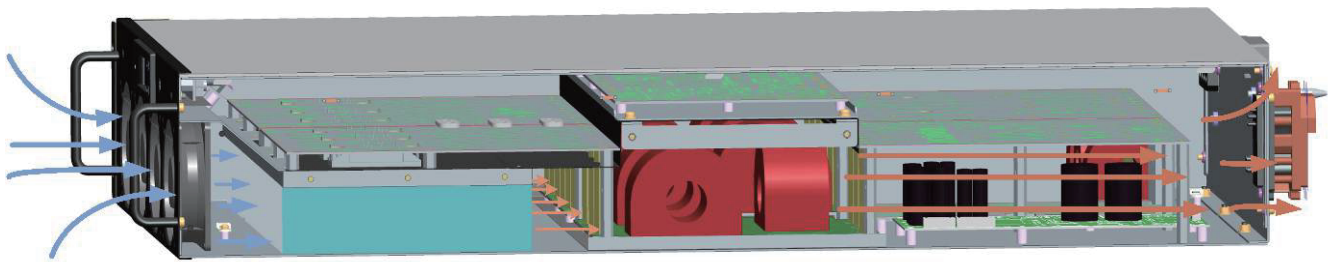
Provide graphical and text based information of alarms, status data, instructions that users can have more friendly and safer operation.



### Isolated Air Flow

The dedicated and redundant hot-swappable power modules take the most unique structure design. In this design, the PCB boards and heat-sinkers are in two completely different layers, which allows the UPS run in dusty environments, significantly improving its stability and environmental adaptability.

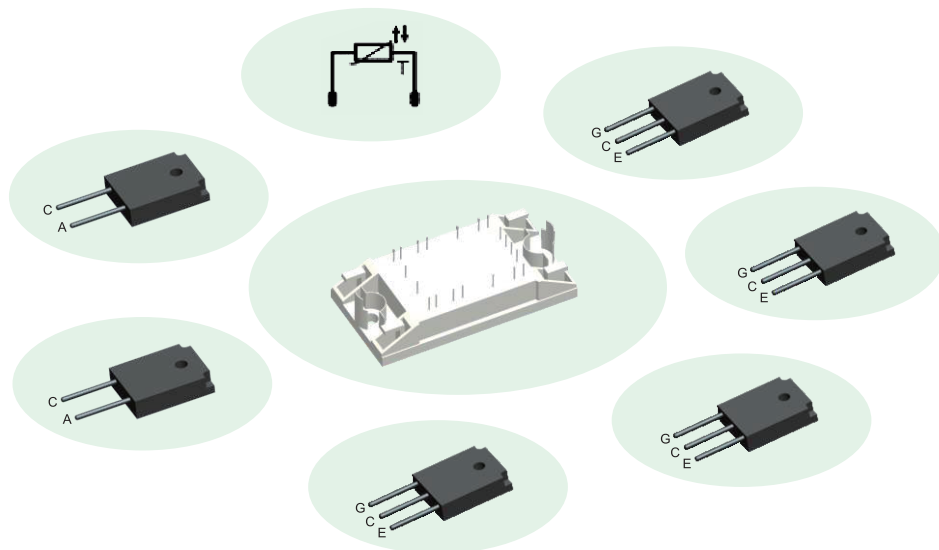
- Cooling air flows in the lower layer, keeping the upper PCB free of dust.
- One air flow channel ensures fans redundancy, even one fan fails, power module can run normally



### Unique Design for High Reliability

Instead of discrete IGBT and SCR components, MS series UPS uses modular IGBT and SCR in Rectifier and Inverter, bringing in extremely high reliability.

- All components in one module, less fault points, higher reliability
- All components integrated as one modular design, smaller disparity
- Less space needed, UPS with compact design and higher power design
- Integrated inner thermal sensors display IGBT inner temperature directly



## High Density ,Modular, Scalable

- High power density, footprint for 300kVA is 0.66m<sup>2</sup>, power density 409kW/m<sup>2</sup>, saving valuable data center space.
- Scalable from 30kVA to 900kVA, max 30 power modules in parallel.



Three u nits in p arallel

- Inherently N+X redundant.
- Hot swappable power module and bypass & monitoring module.
- Additional charging module, extra charging current 50A×N for long time back up application.



Bypass & M onitoring m odule



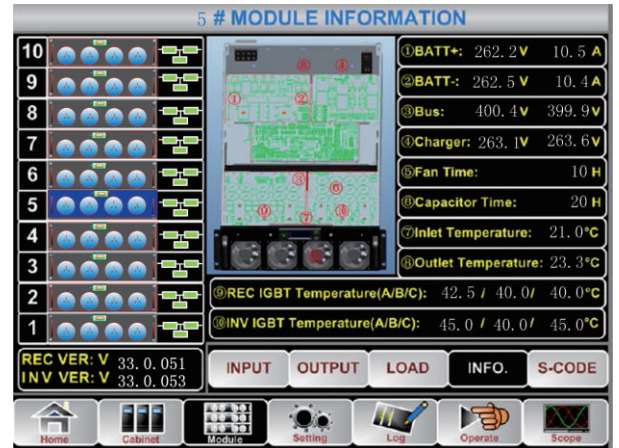
Power m odule



## Comprehensive Monitoring Management

In each power module, information of critical components is monitored and displayed in real time, giving customers a view of inner status of the system and providing reminder information for maintenance.

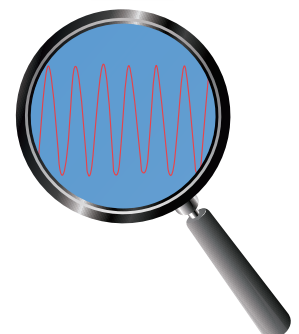
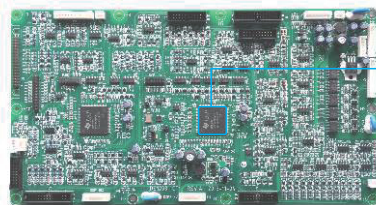
- Maintenance reminder, running time of capacitors and fans displayed and recorded
- Comprehensive temperature monitoring for thermal abnormal detection
- Intelligent battery charger for long battery life.



## Critical Waveform Recording

UPS can record and save the data of the main parameters automatically when faults happen for further analysis.

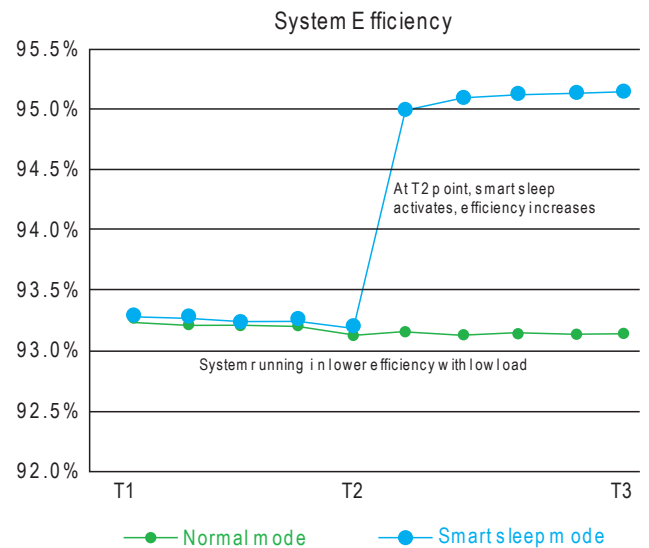
- Can record data information and present as waveform for further analysis
- Can easily spot the causes of the failures, avoid future similar faults



## Smart Sleep

Smart Sleep function can intelligently make some power modules go to sleep when load is relatively low, improving the efficiency of the remaining power modules and saving customers on power and cooling costs.

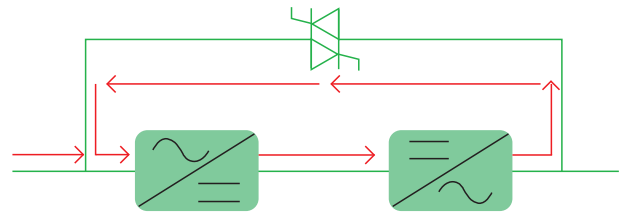
- Improving efficiency, reducing power and cooling costs.
- Easy setting with just two steps. Customers can select sleep mode and rotation period.
- Power modules working in rotation, prolong the life time



## Self-aging

Self-aging is an advanced function applied in all three phase UPS. Self-aging function can test UPS under different load situation without real load, saving more than 90% of energy.

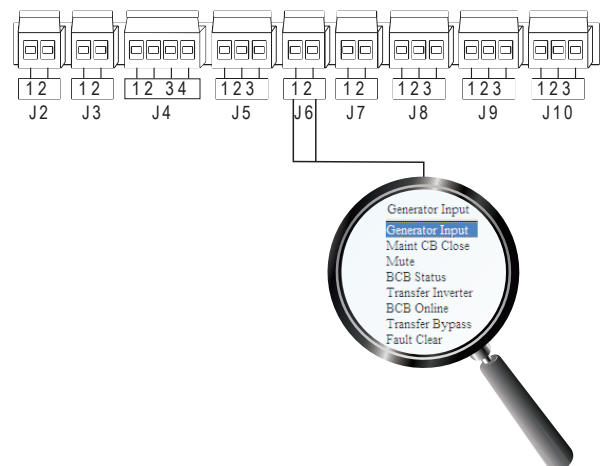
- Simulate different load conditions without connecting to any real load, saving 90% of energy.
- On site setting supported, easy for factory testing



## Programmable Dry Contacts

Programmable dry contacts are available in all MS and HT33 series UPS. Customers can easily expand or modify the definition of each port.

- Abundant options with three inputs and four outputs, all programmable
- Easy setting, just pull the drop-down menu and set Compatible with all the MS and HT33



## Specification

MODEL	MS 600/30X	MS 300/30X	MS 180/30X	MS 500/25X	MS 250/25X	MS 150/25X	
Capacity	600kVA/540kW	300kVA/270kW	180kVA/162kW	500kVA/500kW	250kVA/250kW	150kVA/150kW	
Power module	PM30X(30kVA/27kW)			PM25X(25kVA/25kW)			
<b>INPUT</b>							
Phase	3 P hase + N eutral + G round,400V/415V(line-line)						
Voltage range	304-478Vac ( line-line),full load; 228V-304Vac ( line-line),load d ecreases linearly a cording to the m in p hase v oltage						
Frequency range	40Hz-70Hz						
Power factor	>0.99						
THDi	THDi<3% @ 1 00% l inear load						
<b>OUTPUT</b>							
Voltage	380V/400V/415V						
Voltage regulation	1.5%						
Power factor	0.9			1.0			
THDu	THD<1%(linear load) ,THD<5.5%(non-linear load)						
Crest factor	3:1						
Overload capability	110% for 1 h our; 125% for 10 m in ; 150% for 1 m in ; > 150% for 200 m s						
<b>BATTERY</b>							
Voltage	±240VDC						
Charge power precision	±1%						
Charge power	20% *System P ower						
<b>SYSTEM</b>							
System efficiency	Normal mode:95% ; ECO mode:99% ; Battery mode:95%						
Display	10.4" c olor touch s creen LCD + L ED + K eyboard						
IP class	IP20						
Interface	Standard : RS232,RS485,Dry c ontacts, U SB; Optional: SNMP, Expansion d ry c ontact c ard						
Operation/Storage temperature	0-40℃ /-40-70℃						
Relative humidity	0-95%(non-condensing)						
Noise	72dB @ 1 00% load, 68dB @ 4 5% load (1 m eter a way)	65dB @ 1 00% load, 62dB @ 4 5% load (1 m eter a way)	72dB @ 1 00% load, 68dB @ 4 5% load (1 m eter a way)	65dB @ 1 00% load, 62dB @ 4 5% load (1 m eter a way)			
<b>PHYSICAL</b>							
Weight	Cabinet	660kg	220kg	165kg	660kg	220kg	165kg
	Power Module	PM30X:34kg			PM25X:32kg		
Dimension (W*D*H) (mm)	Cabinet	2000*1050*2000	600*1100*2000	600*1100*1600	2000*1050*2000	600*1100*2000	600*1100*1600
	Power Module	PM30X/ PM25X:460*790*134					