

PW-M Series Modular Online UPS

The PW-M series modular UPS provides the most compact footprint of less than 2m² with maximum capacity of 900kVA. With best reliability and high performance, it has been leading the domestic market for years.

PW-M series is considered to be the best power protection solution for large data Centres, as well as for sensitive electronics.



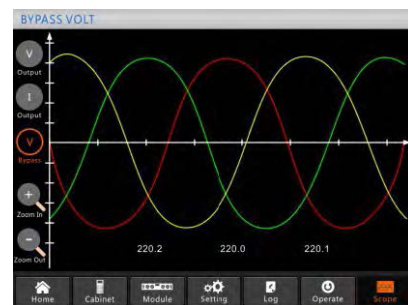
Independent LCD for Each Power Module

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



Friendly Interface

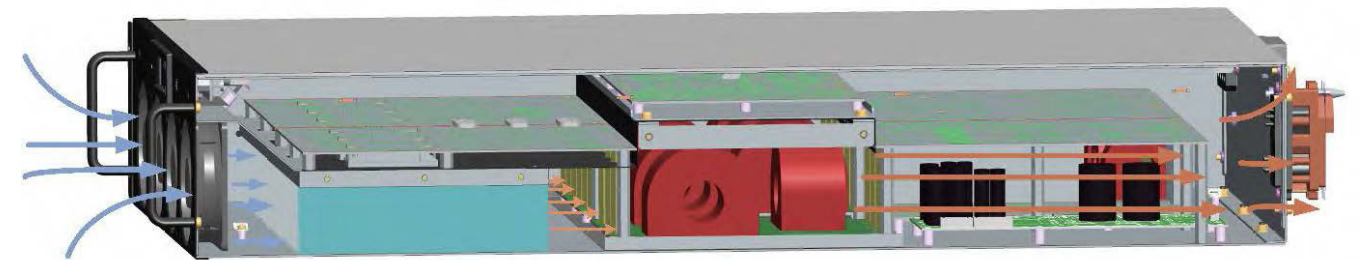
Provide graphical and text based information of alarms, status data, instructions that users can have more friendly and safer operation.



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.

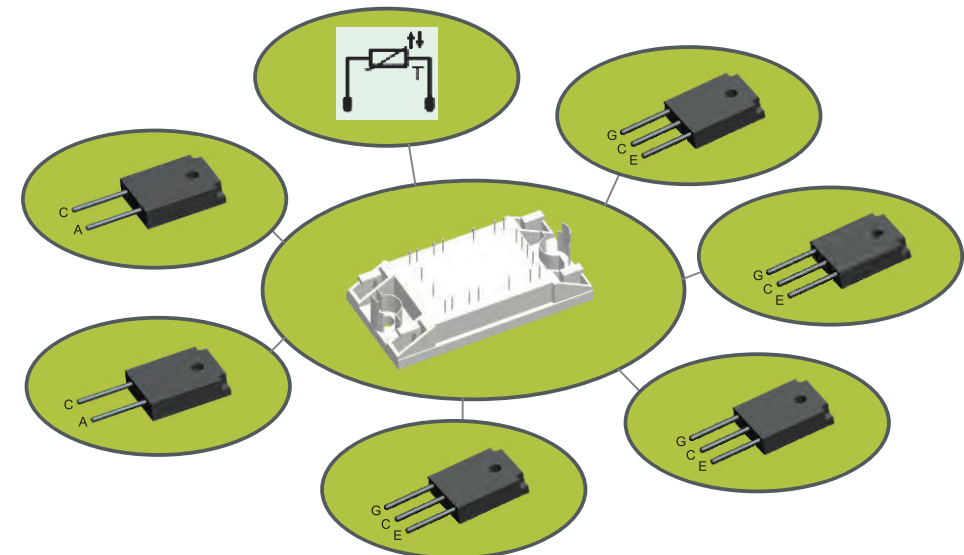
- Cooling air flows in the lower layer, keeping the upper PCB free of dust
- One air flow channel ensures fans redundancy, even one fan fails, power module can run normally



Unique Design for High Reliability

Instead of discrete IGBT and SCR components, PW-M 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 0.66m², power density 409kW/m², saving valuable data Centre space
- Scalable from 30kVA to 900kVA, max 30 power modules in parallel



Three units in parallel

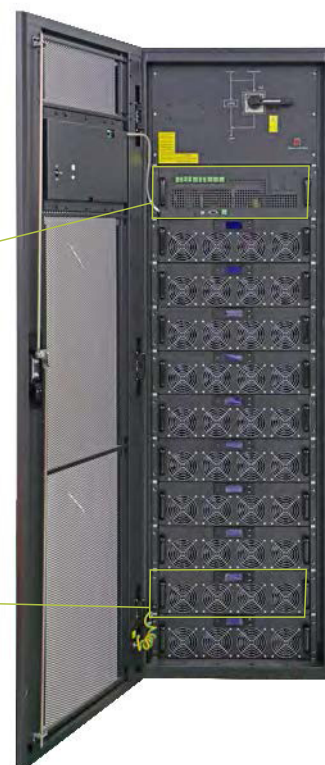
- Inherently N+X redundant
- Hot swappable power module and bypass & monitoring module
- Additional charging module, extra charging current 50A×N for long time back up application



Bypass & Monitoring module



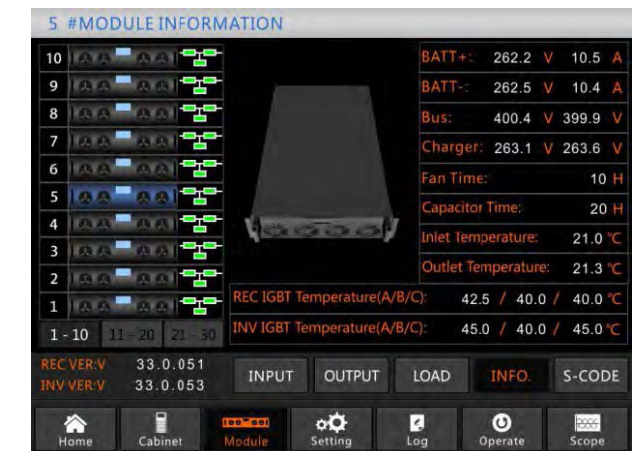
Power module



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.

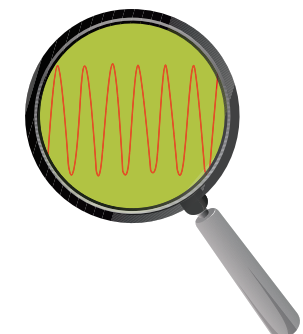
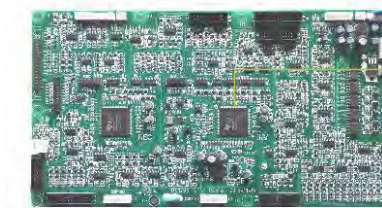
- Maintenance reminder, running time of capacitors and fans displayed and recorded
- Comprehensive temperature monitoring for thermal abnormal detection
- Intelligent battery charger for long battery life



Critical Waveform Recording

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

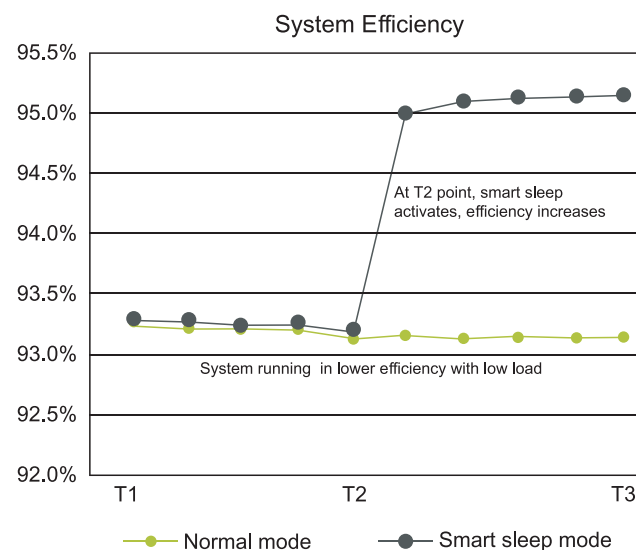
- Can record data information and present as waveform for further analysis
- Can easily spot the causes of the failures, avoid future similar faults



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.

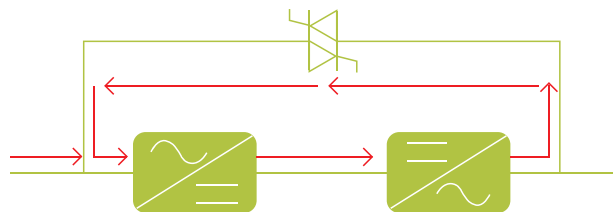
- Improving efficiency ,reducing power and cooling costs
- Easy setting with just two steps. Customers can select sleep mode and rotation period
- Power modules working in rotation, prolong the life time



Self-ageing

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

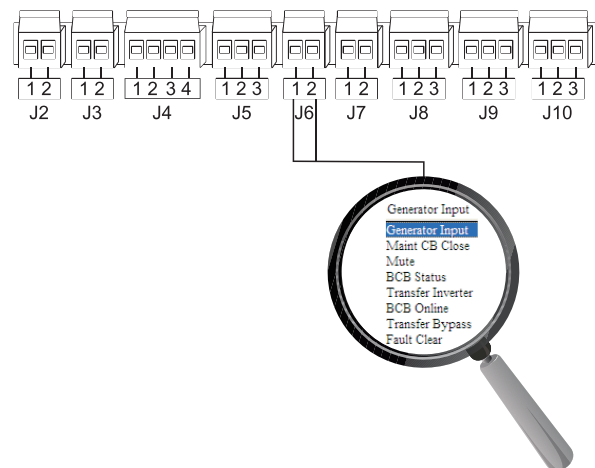
- Simulate different load conditions without connecting to any real load, saving 90% of energy
- On site setting supported, easy for factory testing



Programmable Dry Contacts

Programmable dry contacts are available in all PW-M and PW3 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 PW-M and PW3



Precision Series Single Row Cabinet Data Centre

Precision Product Integration

The precision series single row cabinet data centre integrates all equipment into the cabinet with closed hot and cold aisle systems. The aisles are monitored by sensors within the environmental system with remote intelligent control providing safe and reliable operational environment.



Product Features



Safe and reliable

- All components follow domestic and international standardized production standard to ensure product quality.
- Pre-installation, pre-commissioning and other process are controlled at various levels to ensure product installation and operation safe and reliable.
- Integrated design, improving overall system reliability.
- Intelligent pop-up door system ensure the continuous operation of the system effectively.
- Redundant design, integrated intelligent monitoring system, ensure the safe and reliable operation of the computer room.



Rapid installation

- Engineering free design, suitable for various scenes, install rapidly.
- Modular design of power distribution, hot-swappable ,easy installation and maintenance.
- The system does not need special decoration treatment, the equipment is ready to use. Installation and commissioning cycle only need 4-6 hours.
- A single cabinet is a complete system, which can be easily and quickly expanded to 16 cabinets side by side.



High efficiency and energy saving

- Array/rack mount refrigeration, precise cooling, greatly improve cooling efficiency, compared with traditional computer room energy saving 25%.
- The system adapts N+X online high-efficiency modular UPS, equipped with intelligent sleep function making system save more energy.
- Remote operation and maintenance, human-free design, saving TCO.
- Closed hot and cold aisles, and effective cooling, realize air inner circulation to reduce operating costs.



Intelligent management

- Intelligently monitor power supply and environment status.
- Instant and real-time alarm through various ways(SMS, sound and light, e-mail,phone).
- The monitoring system is compatible with many parts(screen, remote APP, local LCD, remote WEB); friendly HMI.
- Provide kinds of interface(ModbusTCP, MQTT, SNMP), easy to system integration.

PWM Series Modular Online UPS 100-600kVA (380V/400V/415V)

The PWM Series modular UPS the single cabinet power rating covers from 100kVA to 600kVA, provides the highest power density of 100kW power modules in 4U height, 4 units can be paralleled for capacity maximum up to 3.2MW.

With the communication of BMS system, the PWM series deliver the Lithium battery information of cell voltage and cell temperature.



Application

All kinds of medium and large data centre, network servers, control system, precision instruments, communication system etc.

Features

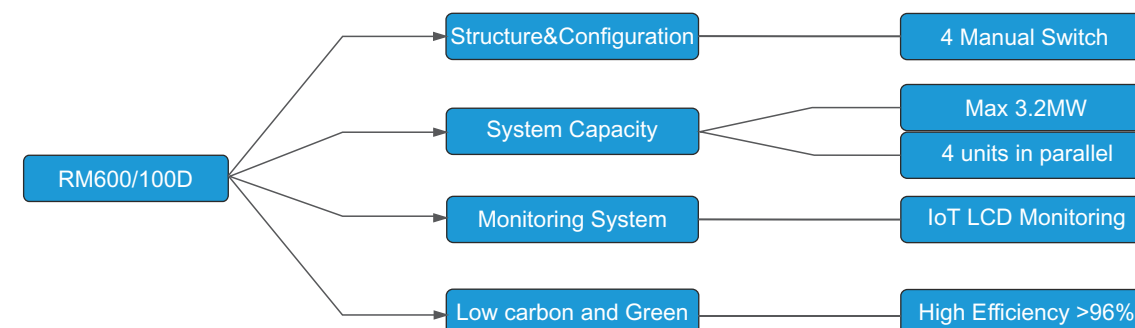
- High efficiency, up to 96%
- Support Lithium battery
- Easy for power expansion and backup time expansion flexible and save more energy
- Modular design, up to 32 power modules in parallel online hot-swappable N+X redundancy
- High power density
- BMS lithium battery data can be seen on the screen of UPS after choosing the corresponding protocol
- Friendly interface with 10" touch colour LCD with graphic display, intuitive information and easier to operate
- All round detection and monitoring system for safety

High density, Modular, Scalable

- High power density, footprint for 600kW is 1.1m², power density 545kW/m², saving valuable data centre space
- Scalable from 100kVA to 3.2MW, max 40 power modules in parallel

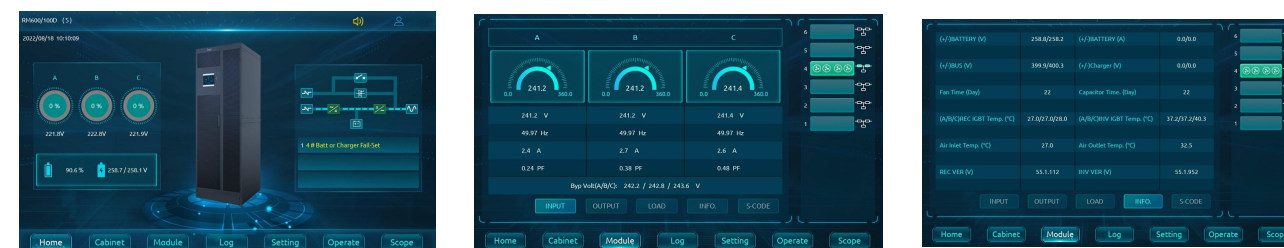


4 Units in parallel



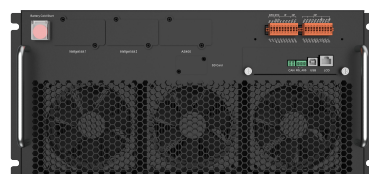
Friendly Interface

Provide graphical and text based information of alarms, status data, and instructions that users can have more friendly display and safer operation from this 10 inch colour touch LCD screen for IoT application and intelligent monitoring.



Impact structure design

This series Modular UPS is equipped with hot-swappable power module and bypass & monitoring modules which is designed for easy maintenance and redundancy 100kVA power capacity in 4U high module, combine with bypass module which is integrated various communication port.



- **Reliable Performance**
3 level inverter, fully digital control, achieving input power factor>0.99, input THDi<3%, overall efficiency >96%
- **Small Size Large Capacity**
High power density, easy to expand to meet the larger data centre application site
- **Four Breakers**
Equipped with input, bypass, output and maintenance bypass switch to save later construction

- **Kinds of Cabinets**
6 slot cabinet, flexible configuration for different project requirements and limit of the room space
- **Various Data Transfer Port**
Adequate ports, such as RS485, USB, CAN, programmable dry contact and SNMP card
- **Convenient Software Buring & Upgrade Version**
burning software without outage to the load, no need to pull out the module



Specification		
MODEL		PWM600/100
System Capacity		600kVA
Power Module Capacity		100kVA/100kW
Input	Dual Input	Optional
	Phase	3 Phase+Neutral+Ground, 380V/400V/415V(line-line)
	Input Voltage Range	323~478Vac (line-line),full load; 228V~304Vac (line-line),load decreases linearly according to the min phase voltage
	Rate Frequency	50/60Hz
	Input Frequency Range	40Hz ~ 70Hz
	Input PF	>0.99
	Input THDi	<3% (100% Linear load)
Bypass	Rate Voltage	380/400/415Vac (line-line)
	Rate Frequency	50/60Hz
	Input Voltage Range	Settable default, -20% ~ + 15% Up limit: +10%, +15%, +20%, +25% / Down limit: -10%, -15%, -20%, -30%, -40%
	Bypass Frequency Range	Settable, ±1Hz, ±3Hz, ±5Hz
	Bypass Overload	110% long term operation; 130% for 1 hour ;150% for 6 mins; 1000% for 100ms 150% ~400% for 1s; >400% less than 200ms
Output	Rate Voltage	380/400/415Vac (line-line)
	Voltage Regulation	±1%
	Rate Frequency	50/60Hz
	Frequency Precision	±0.1%
	Output PF	1
	Output THDu	<1% , Linear load; <5%, Non-linear load
	Inverter Overload	110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms 125% ~150% for 1 min; >150% for 200ms
Battery	Voltage	± 180 ~ 288VDC
		30 ~ 32 pcs derate to 0.7 34~ 36 pcs derate to 0.8
		38 pcs derate to 0.9 40 ~48 pcs
	Voltage Precision	±1%
System	Charge Power	up to 15% * Output active power
	Efficiency	AC Mode >96% Battery Mode >95%
	Display	LED+ Colour touch LCD screen
	Interface	RS485, USB, CAN, Programmable Dry Contact, 2 Intelligent slots
	Option	SNMP Card, AS400 Card, Parallel kit, SPD, LBS, GSM
	Temperature	Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C
	Relative Humidity	0 ~ 95% Non-condensing
	Altitude	<1000m. Within 1000m to 2000m, 1% power derating for every 100m rise
	Noise (1 meter)	75dB @ 100% load, 70dB@ 45% load
Physical	Dimension	Cabinet 1000*1100*2000
	W*D*H(mm)	Power module 440*794.5*174
	Weight (kg)	Cabinet 500
		Power module 50

PW-M Series Modular Online UPS 60-600kVA (380V/400V/415V)

The PW-M Series are modular online UPS with brand new topology, bidirectional DC-DC Converter circuit, which greatly improve the system performance and guarantees high efficiency.
Its compact design ensures the power density, achieve this 600kW system occupies only an area of 0.92m2. PW-M series is considered to be an excellent power supply solution for large data centres and facilities.



Power Module

The cabinet of PW-M600/60D contains 10 power modules, each of them is 60kVA power capacity in 2U height. With the knob on the front panel, the UPS can achieve hot-swappable without power outage of the load, make it available for redundancy and maintenance online.

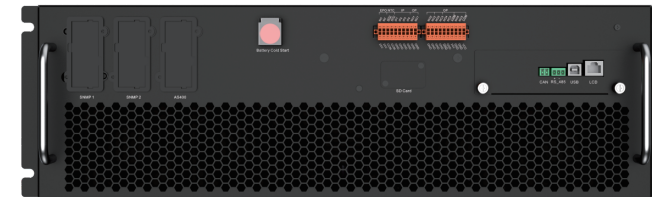
- Modular Compact Cabinet Design contains maximum 10 slots.
- Module Status LED Indicator show the status of each power module.
- Bidirectional DC-DC converter circuit achieve 30% charger which greatly improve the system performance.
- Overall efficiency reaches 97%, the collaboration between batteries and power grid improve the UPS utilisation significantly.



Bypass Monitoring Module

This series are equipped with the bypass and monitoring module full of intelligent slots, communication interface, battery cold start buttons and adequate dry contacts. With these various ports, it can satisfy users a convenient data transfer service, providing comprehensive monitoring.

- Diverse communication interface and multiple standard part
- Convenient CAN communication for software burning and version upgrade after transferring to maintenance mode.
- Isolation between LCD and monitoring board, connect them by network cable significantly improve the reliability and prevent the damage of the DSP.



Application

All kinds of medium and large data centre, network servers, control system, precision instruments and intelligent equipments.

- Financial institution
- Education, office & PC
- Military and government
- Communications
- Medical
- Power supply manufacture



Friendly Interface

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



High Density, Flexible, Artistic

- High power density, 60kW power modules and 2U-high body footprint for 600kVA is 0.88m², power density. 682kW/m², saving great space of data centre.
- Flexible capacity expansion and redundancy from 60kVA to 1.8MW, max 30 power modules, 3 cabinets in parallel.



3 Units in parallel

- Ultra large 10.1 inch colour touch LCD display for IoT application and intelligent monitoring.



10 Inch LCD

Features

- High efficiency, up to 97%
- Support Lithium battery
- Intelligent staggering power consumption, become more flexible and save more energy
- Double side DC-DC topology platform, support charging power reaching 30%
- High power density
- BMS lithium battery data can be seen on the screen including the temperature and voltage of each cell
- Friendly interface with 10" touch colour LCD with graphic display, intuitive information and easier to operate
- Modular design, up to 30 power modules in parallel online hot-swappable N+X redundancy

Specification

MODEL		PWM600/60
System Capacity		600kVA
Power Module Capacity		600kVA/60kW
Input	Dual Input	Standard
	Phase	3 Phase+Neutral+Ground, 380V/400V/415V(line-line)
	Input Voltage Range	323~478Vac (line-line),full load; 323V~138Vac (line-line),load decreases linearly from 100% to 30% according to min phase voltage
	Rate Frequency	50/60Hz
	Input Frequency Range	40Hz ~ 70Hz
	Input PF	>0.99
	Input THDi	<3% (100% Linear load)
Bypass	Rate Voltage	380/400/415VAC (line-line)
	Rate Frequency	50/60Hz
	Input Voltage Range	Settable default, -20% ~ + 15% Up limit: +10%, +15%, +20%, +25% / Down limit: -10%, -15%, -20%, -30%, -40%
	Bypass Frequency Range	Settable, ±1Hz, ±3Hz, ±5Hz
	Bypass Overload	110% long term operation; 110% ~125% for 10 mins; 125% ~150% for 1min; >150% for 200ms
Output	Rate Voltage	380/400/415VAC (line-line)
	Voltage Regulation	±1%
	Rate Frequency	50/60Hz
	Frequency Precision	±0.1%
	Output PF	1
	Output THDu	<1% , Linear load; <5%, Non-linear load
	Inverter Overload	110% for 1 hour; 110% ~125% 10 mins; 125% ~150% for 1 min; >150% for 200ms
Battery	Voltage	±180 ~ 264VDC
		30 pcs derate to 0.7 32~ 34 pcs derate to 0.8
		36~ 38 pcs derate to 0.9 40 ~44 pcs
	Voltage Precision	1%
	Charge Power	up to 30% * Output active power
System	Efficiency	AC Mode >97% Battery Mode >96%
	Display	LED+ Colour touch LCD screen
	Interface	Standard: RS485, USB, CAN, Programmable Dry Contact
		Intelligent card slots *2, Extendable dry contact slot
	Option	SNMP Card, AS400 Card, Parallel kit, SPD, Dual input kit, LBS,
	Temperature	Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C
	Relative Humidity	0 ~ 95% Non-condensing
	Altitude	<1000m. Within 1000m to 2000m, 1% power derating for every 100m
	Noise (1 meter)	75dB @ 100% load, 70dB@ 45% load
	Application Standard	Safety: IEC/EN 62040-1 EMC:IEC/EN62040-2 Performance: IEC/EN 62040-3
Physical	Dimension	Cabinet 800*1100*2000
	W*D*H(mm)	Power module 550*750*85
	Weight (kg)	Cabinet 443
		Power module 35.7

PW-M Series Modular Online UPS

40 / 50 - 400 / 500kVA (380V/400V/415V)

The PW-M series modular, online UPS ranging from 40kVA to 500kVA is designed to protect any critical load for medium and large data Centre achieving maximum availability. The PW-M series feature the latest technology of 3-level technology and PFC input control, which guarantees high efficiency of 96% and ultra-reliability. Its compact design ensures power density of 500kVA in one cabinet, 3 units can be paralleled for capacity or redundancy up to 1500kVA, making it an excellent choice for medium and large facilities.



Features

Compact design

500kVA in one cabinet, footprint less than 1.45m², saving valuable room space

High power density

50kVA power module in 4 U height, easy for capacity expansion

High efficiency

Advanced 3-level technology guarantees high efficiency operating in double conversion mode up to 96%

Intelligent charging management

The system intelligently control the whole process of the charging and discharging, effectively improve the life time of the battery

High scalability

The system can be configured from 40kVA to 500kVA in one single cabinet, 3 units in parallel for a capacity up to 1500kVA

Friendly HMI

10.4" touch colour LCD with graphic display, independent LCD for each power module

Smart sleep function

System can intelligently shutdown some power modules to increase total load rate, achieving higher efficiency

Multi communication interface

Provide RS232, RS485, USB, SNMP, AS400 and programmable dry contacts

Specification

MODEL			PM500/50X	PM400/50X	PM300/50X	PM200/50X	PM100/50X	PM400/40X	PM320/40X	PM240/40X	PM160/40X	PM080/40X	
System Capacity			500kVA	400kVA	300kVA	200kVA	100kVA	400kVA	320kVA	240kVA	160kVA	80kVA	
Power Module Capacity			50kVA/50kW						40kVA/40kW				
Input	Dual Input		Standard		Optional	Standard				Optional		Standard	
	Phase		3 Phase+Neutral+Ground, 380V/400V/415V(line-line)										
	Input Voltage Range		304~478Vac (line-line),full load; 228V~304Vac (line-line),load decreases linearly according to the min phase voltage										
	Rate Frequency		50/60Hz										
	Input Frequency Range		40Hz ~ 70Hz										
	Input PF		>0.99										
	Input THDi		<3% (100% Linear load)										
Bypass	Rate Voltage		380/400/415Vac (line-line)										
	Rate Frequency		50/60Hz										
	Input Voltage Range		Settable, -40% ~ +25%										
	Bypass Frequency Range		Settable, ±1Hz, ±3Hz, ±5Hz										
	Bypass Overload		110% long term 130% for 5 mins 150% for 1min >150% for 1s		125% long term 130% for 10 mins 150% for 1 min >150% for 300ms		110% long term 125% for 5 mins 150% for 1 min >150% for 1s		125% long term 130% for 10 mins 150% for 1 min >150% for 300ms				
Output	Rate Voltage		380/400/415Vac (line-line)										
	Voltage Regulation		1% for balance load; 1.5% for unbalance load										
	Rate Frequency		50/60Hz										
	Frequency Precision		0.1%										
	Output PF		1										
	Output THDu		<1% , Linear load; <5.5%, Non-linear load										
	Crest Factor		3:1										
	Inverter Overload		110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms										
Battery	Voltage		±240Vdc										
	Battery Number		40pcs (Settable: even number from 32 to 44)										
	Voltage Precision		±1%										
	Charge Power		up to 20% * Output active power										
	Battery Cold Start		Standard		Optional			Standard			Optional		
System	Efficiency		AC Mode: 96.0% ECO Mode: 99.0% Battery Mode: 96.0%										
	Display		10.4"(240kVA-500kVA) or 7"(80kVA-200kVA) touch screen LCD + LED + keyboard										
	IP Class		IP 20										
	Interface		RS232,RS485, Programmable Dry Contact, USB										
	Option		SNMP Card, Parallel kit, SPD, LBS, Dust filter										
	Temperature		Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C										
	Relative Humidity		0 ~ 95% Non-condensing										
	Altitude		<1000m. Within 1000m to 2000m, 1% power derating for every 100m rise										
	Noise (1 meter)		72dB @ 100% load, 69dB @ 45% load										
	Applicable Standards		Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3										
Physical	Weight (kg)	Cabinet	450	340	220	170	120	450	340	220	170	120	
		Power module	45						44				
	Dimension W*D*H(mm)	Cabinet	1300*1100 *2000	1050*1000 *2000	650*1095 *2000	650*960 *1600	600*980 *1150	1300*1100 *2000	1050*1000 *2000	650*1095 *2000	650*960 *1600	600*980 *1150	
		Power module	510*700*178										

PW-M Series Rack-Mounted Modular Online UPS

25-200kVA (380V/400V/415V)

The PW-M Series Rack Mounted Modular UPS is scalable, hot-swappable, online double conversion. The power capacity is from 25 to 200kVA/kW, it's the ideal choice for modern data Centre. With the latest IGBT three-level and full DSP control technology, the new PW-M series delivers the best combination of reliability and flexibility.



Application

IDC(Internet Data Centre), network servers and workstation, control system, communication system, office, PC etc

Features

- High Power Density
25kVA power module in 2U height, saving great amount of space, easy for capacity expansion
- Rack Modular Design
Module design, compatible with 19" standard rack cabinet, convenient to be integrated with servers
- Battery Cold Start
UPS can be powered on from the battery without utility
- Friendly Interface
Touch LCD display with abundant information

Specification

MODEL		PM150/25C	PM200/25C
System Capacity		150kVA	200kVA
Power Module Capacity		25kVA/25kW	
Input	Dual Input	Optional	Standard
	Phase	3 Phase+Neutral+Ground, 380V/400V/415V(line-line)	
	Input Voltage Range	304~478Vac (line-line),full load; 228V~304Vac (line-line),load decreases linearly according to the min phase voltage	
	Rate Frequency	50/60Hz	
	Input Frequency Range	40Hz ~ 70Hz	
	Input PF	>0.99	
	Input THDi	<3% (100% Linear load)	
Bypass	Rate Voltage	380/400/415Vac (line-line)	
	Rate Frequency	50/60Hz	
	Input Voltage Range	Settable, -40% ~ +25%	
	Bypass Frequency Range	Settable, ±1Hz, ±3Hz, ±5Hz	
	Bypass Overload	110% long term operation; 125% for 5 mins ;150% for 1 min; >150% for 1s	
Output	Rate Voltage	380/400/415Vac (line-line)	
	Voltage Regulation	±1(0~100% linear load)	
	Rate Frequency	50/60Hz	
	Frequency Precision	0.1%	
	Output PF	1	
	Output THDu	<1% , Linear load; <6%, Non-linear load	
	Crest Factor	3:1	
	Inverter Overload	110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms	
Battery	Voltage	±240Vdc	
	Battery Number	40pcs (Settable: even number from 32 to 44)	
	Voltage Precision	±1%	
	Charge Power	up to 20% * Output active power	
	Battery Cold Start	Standard	
System	Efficiency	AC Mode	96.0%
		ECO Mode	98.0%
		Battery Mode	95.5%
	Display	7.0" color touch screen LCD + LED + keyboard	
	IP Class	IP 20	
	Interface	RS232, RS485, Programmable Dry Contact	
	Option	PDU for RM150/25C,SNMP Card, Parallel kit,SPD, LBS	
	Temperature	Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C	
	Relative Humidity	0 ~ 95% Non-condensing	
	Altitude	<1000m. Within 1000m to 2000m, 1% power derating for every 100m rise	
	Noise (1 meter)	65dB @ 100% load, 62dB @ 45% load	
	Applicable Standards	Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3	
Physical	Weight (kg)	Cabinet	140
		Power module	18
	Dimension W*D*H(mm)	Cabinet	482*916*931
		Power module	436*677*85

PW-M Series Modular Online UPS

20-200kVA (380V/400V/415V)

PW-M series is modular online UPS for sensitive equipments. The single cabinet power rating covers from 20kVA to 200kVA. With the latest IGBT three-level and full DSP control technology, the PW-M series delivers the best of combination of reliability, hotswappable and flexibility.



Features

Modular design

Up to 20 power modules in parallel online hot-swappable
N+X redundancy

Independent charger

Independent charger for each module and intelligently
control the whole charging process, prolong the life time of
the battery

Battery cold start

UPS can be powered on from the battery without utility

Easy connection access

Top and bottom cable entry connection are supported, more
convenient for site installation

Modular design with transformer

Modular UPS up to 60kVA with in-built isolation transformer,
meeting different requirement for customers

High power density

200kVA with footprints of about 0.5m², saving valuable data
Centre space

Integrated IGBT design

Integrated IGBT in one module, less failure points with
higher performance and reliability

Friendly interface

Touch LCD display with abundant information

Independent air channel

Cooling air runs in isolated channel, keeping PCB free of
dust



Specification

MODEL			PM200/20	PM120/20	PM060/20
System Capacity			200kVA	120kVA	60kVA
Power Module Capacity			20kVA/18kW		
Input	Dual Input		Optional		
	Phase		3 Phase+Neutral+Ground, 380V/400V/415V(line-line)		
	Input Voltage Range		304~478Vac (line-line),full load; 228V~304Vac (line-line),load decreases linearly according to the min phase voltage		
	Rate Frequency		50/60Hz		
	Input Frequency Range		40Hz ~ 70Hz		
	Input PF		>0.99		
	Input THDi		<3% (100% Linear load)		
Bypass	Rate Voltage		380/400/415Vac (line-line)		
	Rate Frequency		50/60Hz		
	Input Voltage Range		Settable, -40% ~ +25%		
	Bypass Frequency Range		Settable, ±1Hz, ±3Hz, ±5Hz		
	Bypass Overload		125% long term operation; 130% for 1 hour ;150% for 6 mins; 1000% for 100ms		
Output	Rate Voltage		380/400/415Vac (line-line)		
	Voltage Regulation		1% for balance load; 1.5% for unbalance load		
	Rate Frequency		50/60Hz		
	Frequency Precision		0.1%		
	Output PF		0.9		
	Output THDu		<1% , Linear load; <5.5%, Non-linear load		
	Crest Factor		3:1		
	Inverter Overload		110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms		
	Battery	Voltage		±240Vdc	
Battery Number		40pcs (Settable: even number from 32 to 44)			
Voltage Precision		±1%			
Charge Power		up to 20% * Output active power			
Battery Cold Start		Standard			
System	Efficiency	AC Mode	95.0%		
		ECO Mode	99.0%		
		Battery Mode	95.0%		
	Display		5.7" touch screen LCD + LED + keyboard		
	IP Class		IP 20		
	Interface		RS232,RS485, Programmable Dry Contact		
	Option		SNMP Card, Parallel kit, SPD, LBS, Dust filter		
	Temperature		Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C		
	Relative Humidity		0 ~ 95% Non-condensing		
	Altitude		<1000m. Within 1000m to 2000m, 1% power derating for every 100m rise		
	Noise (1 meter)		55dB @ 50% load		
	Applicable Standards		Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3		
	Physical	Weight (kg)	Cabinet	180	150
Power module			22		
Dimension W*D*H(mm)		Cabinet	600*900*2000	600*900*1600	600*900*1100
		Power module	440*590*134		

PW-M Series Rack-Mounted Modular Online UPS

10-90kVA (380V/400V/415V)

The rack modular, scalable, hot-swappable, online double conversion UPS ranging is from 10 to 90kVA, with its flexible configuration of 3/3, 3/1 and 1/1, compact structure, is the ideal choice for small and medium data Centre.



Features

Rack modular design

Modular design, compatible with 19" standard rack cabinet, convenient to be integrated with servers

High power density

10/15kVA power module in 2U height, saving great amount of space, easy for capacity expansion

Integrated solution for data Centre

UPS can be integrated with battery cabinet, PDU and external maintenance bypass, offering excellent choice for data Centre

Intelligent charging management

The system intelligently control the whole process of the charging and discharging, effectively improving the life time of the battery

Flexible configuration

The system based on 10kVA power module can be configured to 3/3, 3/1 and 1/1 without derating

Friendly interface

7" touch colour LCD with graphic display, more information displayed and easier for customer to operate

Smart sleep function

System can intelligently shutdown some power modules to increase total load rate, achieving higher efficiency

Self-ageing mode

Energy internal circle technology, system can run with full load ,saving more than 90% energy

Specification

MODEL			PM060/10X	PM040/10X	PM030/10X	PM020/10X	PM090/15X	PM045/15X	PM030/15X
System Capacity			60kVA	40kVA	30kVA	20kVA	90kVA	45kVA	30kVA
Power Module Capacity			10kVA/10kW				15kVA/15kW		
Input	Dual Input		Standard						
	Phase		3 Phase+Neutral+Ground, 380V/400V/415V(line-line)						
	Input Voltage Range		304~478Vac (line-line),full load; 228V~304Vac (line-line),load decreases linearly according to the min phase voltage						
	Rate Frequency		50/60Hz						
	Input Frequency Range		40Hz ~ 70Hz						
	Input PF		>0.99						
	Input THDi		<4% (100% Linear load)						
Bypass	Rate Voltage		380/400/415Vac (line-line)						
	Rate Frequency		50/60Hz						
	Input Voltage Range		Settable, -40% ~ +25%						
	Bypass Frequency Range		Settable, ±1Hz, ±3Hz, ±5Hz						
	Bypass Overload		125% long term operation; 130% for 10mins ; 150% for 1 min; >150% for 300ms				110% long term operation; 130% for 5mins ; 150% for 1 min; >150% for 300ms		
Output	Rate Voltage		380/400/415Vac (line-line)						
	Voltage Regulation		1% for balance load; 1.5% for unbalance load						
	Rate Frequency		50/60Hz						
	Frequency Precision		0.1%						
	Output PF		1						
	Output THDu		<1% , Linear load; <5.5%, Non-linear load						
	Crest Factor		3:1						
	Inverter Overload		110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms						
Battery	Voltage		± 240Vdc						
	Battery Number		40pcs (Settable: even number from 32 to 44)						
	Voltage Precision		±1%						
	Charge Power		up to 20% * Output active power						
	Battery Cold Start		Optional						
System	Efficiency	AC Mode	95.0%						
		ECO Mode	98.0%						
		Battery Mode	94.5%						
	Display		7.0" color touch screen LCD + LED + keyboard						
	IP Class		IP 20						
	Interface		RS232,RS485, Programmable Dry Contact						
	Option		SNMP Card, Parallel kit, SPD, Power module with battery cold start function						
	Temperature		Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C						
	Relative Humidity		0 ~ 95% Non-condensing						
	Altitude		<1000m. Within 1000m to 2000m, 1% power derating for every 100m rise						
	Noise (1 meter)		56dB @ 50% load						
	Applicable Standards		Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3						
	Physical	Weight (kg)	Cabinet	70	51	55	42	70	55
Power module			15.3				15.5		
Dimension W*D*H(mm)		Cabinet	485*751*1033	485*697*575	485*751*575	485*697*398	485*751*1033	485*751*575	485*697*398
		Power module	436*590*85						

PW-M Series In-built Battery Modular Online UPS 20-60kVA (380V/400V/415V)

PWM060/20B series are modular online UPS with hot-swappable battery. The single cabinet power rating covers from 20kVA to 60kVA which delivers the best of combination of reliability, hotswappable and flexibility.

With intelligent battery protection and management technology, PWM060/20B realises a compact total power solution which is easy for installation, maintenance and power expansion.

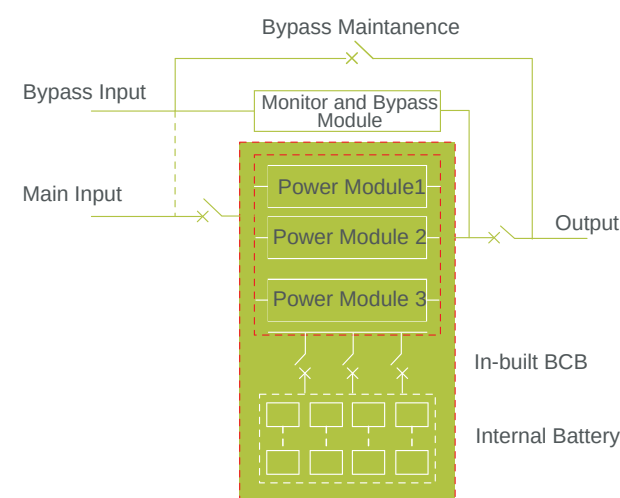


Features

- Modular design with swappable battery package
- Monitor system for battery
- Integrated IGBT module with improved performance and reduced size
- Easy for installation and maintenance
- Easy for power expansion and backup time expansion
- Intelligent protection technology for safe and reliable hot swappable battery package of the system
- Smart charging management system, Intelligently control the whole process of the charging and discharging, effectively improving the life time of the battery
- Battery cold start
- Friendly human machine interface with touch screen



10pcs 7 or 9 Ah batteries



Specification			
MODEL		PM060/20B	
System Capacity		60kVA	
Power Module Capacity		20kVA/18kW	
Input	Dual Input	Optional	
	Phase	3 Phase+Neutral+Ground, 380V/400V/415V(line-line)	
	Input Voltage Range	304~478Vac (line-line),full load; 228V~304Vac (line-line),load decreases linearly according to the min phase voltage	
	Rate Frequency	50/60Hz	
	Input Frequency Range	40Hz ~ 70Hz	
	Input PF	>0.99	
	Input THDi	<3% (100% Linear load)	
Bypass	Rate Voltage	380/400/415Vac (line-line)	
	Rate Frequency	50/60Hz	
	Input Voltage Range	Settable, -40% ~ +25%	
	Bypass Frequency Range	Settable, ±1Hz, ±3Hz, ±5Hz	
	Bypass Overload	125% long term operation; 130% for 1 hour ;150% for 6 mins; 1000% for 100ms	
Output	Rate Voltage	380/400/415Vac (line-line)	
	Voltage Regulation	1% for balance load; 1.5% for unbalance load	
	Rate Frequency	50/60Hz	
	Frequency Precision	0.1%	
	Output PF	0.9	
	Output THDu	<1% , Linear load; <5.5%, Non-linear load	
	Crest Factor	3:1	
	Inverter Overload	110% for 1 hour; 125% for 10 mins ;150% for 1 min; >150% for 200 ms	
Battery	Voltage	±240Vdc	
	Battery Number	40pcs (Settable: even number from 32 to 44)	
	Voltage Precision	±1%	
	Charge Power	up to 20% * Output active power	
	Battery Cold Start	Standard	
System	Efficiency	AC Mode	95.0%
		ECO Mode	99.0%
		Battery Mode	95.0%
	Display	5.7" touch screen LCD + LED + keyboard	
	IP Class	IP 20	
	Interface	RS232,RS485, Programmable Dry Contact	
	Option	SNMP Card, Parallel kit, SPD, LBS, Dust filter	
	Temperature	Operation: 0 ~ 40 °C Storge: -40 ~ 70 °C	
	Relative Humidity	0 ~ 95% Non-condensing	
	Altitude	<1000m. Within 1000m to 2000m, 1% power derating for every 100m rise	
	Noise (1 meter)	55dB @ 50% load	
	Applicable Standards	Safety: IEC/EN 62040-1 EMC: IEC/EN 62040-2 Performance: IEC/EN 62040-3	
	Weight (kg)	Cabinet: 205kg Power module: 22kg Battery package: 10kg (without battery)	
	Physical	Dimension	
		W*D*H(mm)	
Physical	Dimension W*D*H(mm)	Cabinet	600*1020*2000
		Power module	440*590*134
		Battery package	120*824*177