

PM Series Modular UPS

ONLINE UPS
10-1560kVA
Three Phase / Three Phase

High Performance, Modular
3-Phase Power Protection

Scalable up to 2080kVA,
With 95.5% High Efficiency
for High Density Data Centers
and Critical Applications



- Full IGBT Double Conversion Technology
- Perfect Generator Compatibility
- Wide Input Voltage Range: 208-478VAC (3/1 & 3/3)
- Output Power Factor:1 (Optional 0,9)
- Hot Swappable Maintenance (Ups & Battery)
- Separated Bypass
- Optional External Battery Quantity (16-20 pcs)
- Remote EPO/EPO Function
- Common Battery
- Control Monitoring with 5" Color Touch-Screen LCD Graphic Display
- Control of On/Off State of Each Module
- Superior MTBF and MTTR
- Freely Set The Charge Current
- Intelligent Charging
- Super-large LCD Display (With Touchable Screen)
- Single Module LCD Display
- Mid or Small Power Distributing System

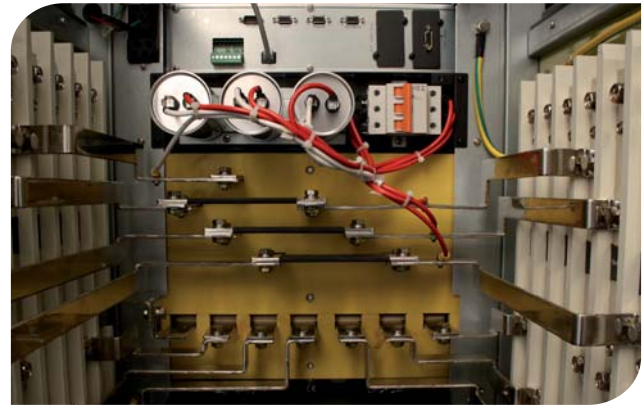
10kVA • 15kVA • 20kVA • 25kVA • 30kVA • 40kVA

PM Series

PM Series is a scalable, redundant Modular UPS system designed to cost effectively provide high level availability for high density data centers and critical applications. The UPS is built using true Online Double Conversion and advanced DSP control technology. It's Modular Architecture can scale power and runtime as demand grows or as higher levels of availability required.

An Intelligent Modular UPS Design for High Density Data Centers

PM Series combines the modular design with the N+X parallel redundancy technology. PM Series modules can be connected in parallel configuration to provide redundancy or to increase the system's total capacity. The maximum capacity of a single cabinet is 520kVA. Cabinets can operate in parallel configuration to build a system of up to 2080kVA.



Scalable Modular Architecture

Scalable up to the highest active power rating available through two dimensional modularity: Vertical and Horizontal.



Vertical Modularity

Weighing is only 31kg and measuring vertically 3U, lightweight 40kVA PM modules are easily handled by the individual technician and extracted for service purposes while the UPS system continues to protect your load.

Horizontal Modularity

PM can scale up to 2.8MW in power by adding complete 40kW UPS modules in 520kVA UPS cabinets side-by-side the input/output power section.



N+X parallel redundancy

PM series UPS adopts N+X parallel redundancy design, users can set different redundancy according to the importance of the load. While the number of redundancy modules are more than two, the availability of UPS system will achieve 99.999% and the MTBF will be more than 15,000,000 hours which can satisfying the reliability requirement of critical load. The UPS redundancy degree can be set through the LCD, when the load exceeds the set value, the UPS will alarm in time.

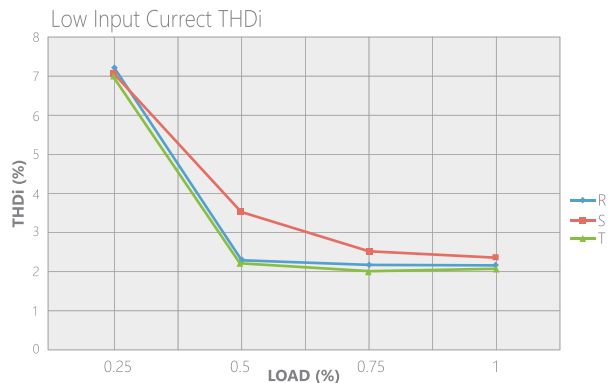
Decentralized Parallel Structure Concept

- Each UPS module contains all required hardware and software for whole system operation. They share no common components.
- Reduces SPOF (Single Points of Failure) and MTTR (Meantime to repair)
- Increases Power Availability
- Safe Swappable Modular Concept

Lower Total Cost of Ownership

High Input power factor (>0.99) and low input Total Harmonic Distortion (THDi<2%) minimizes installation costs by enabling the use of smaller generators and cabling. Fully-rated power kVA equals kW feature option reduces cost by eliminating the need for an oversized UPS for Power Factor Corrected (PFC) loads.

Modules	Output Power	Dimensions (W x H x D)	Weight
PM 3310-RM	10kVA 3/3 Module	443x131x580mm 3U	26kg
PM 3315-RM	15kVA 3/3 Module	443x131x580mm 3U	30kg
PM 3320-RM	20kVA 3/3 Module	443x131x580mm 3U	31kg
PM 3325-RM	25kVA 3/3 Module	443x131x580mm 3U	31kg
PM 3330-RM	30kVA 3/3 Module	443x131x580mm 3U	32kg
PM 3340-RM	40kVA 3/3 Module	443x131x580mm 3U	33kg



Green Power and High Efficiency

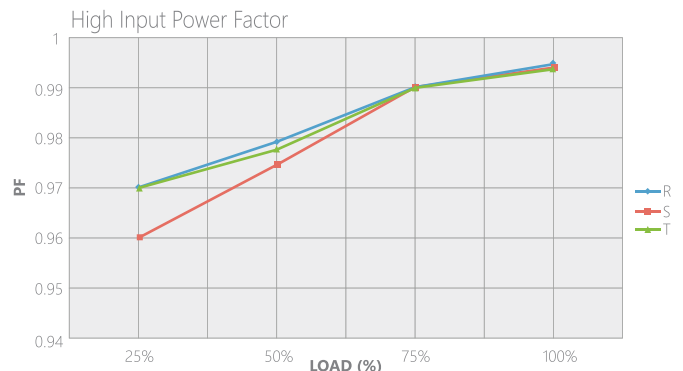
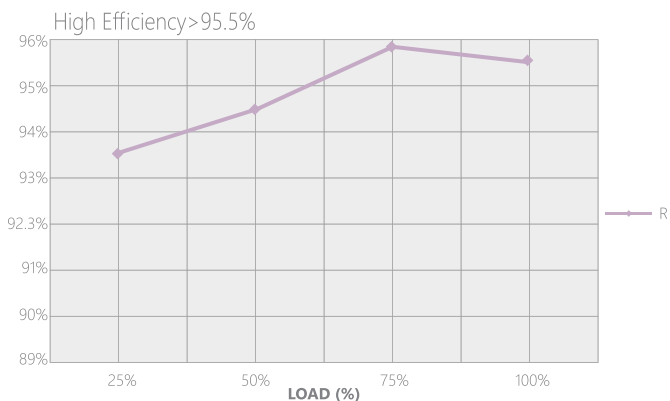
PM Designed for highly economical energy consumption and is a perfect fit in your data center and server room. Offering efficiency of up to 95.5%, THDi of 2% and unity Input Power Factor without harmonic filters. PM delivers:

- Significant energy savings
- Lower cooling costs
- Smaller generator sizing

Hot Swappable Battery Modules

Plug and play battery modules ensures uninterrupted power to protected equipment while batteries are being replaced. Allows quick and easy battery replacement.

- Each Battery Module Consists of 18 pcs 7Ah/9Ah
- Only 3U Height
- Simply Plug into UPS System



MODEL	PM 3310-100kVA	PM 3320-200kVA	PM 3325-250kVA	PM 3330-300kVA	PM 3340-520kVA	PM 3340-800kVA	PM 3340-1040kVA	PM 3340-1540kVA	
CAPACITY									
UPS Cabinet	10~100kVA	20~200kVA	25~250kVA	30~300kVA	40~520kVA	800kVA	1040kVA	1560kVA	
Paralleling	Up to 6 Frame	Up to 6 Frame	Up to 6 Frame	Up to 6 Frame	Up to 4 Frame	Up to 2 Frame	Up to 2 Frame	Up to 1 Frame	
Max. Power	600kW	1200kW	1500kW	1800kW	2080kW	1440kW	2080kW	1404kW	
PM Module	10kVA/10kW, 15kVA/15kW, 20kVA/20kW, 25kVA/25kW, 30kVA/30kW, 40kVA/40kW								
INPUT									
Phase	3 Phase 4 Wires and Ground								
Rated Voltage	380/400/415 VAC								
Voltage Range	208~478VAC or 120VAC~276VAC								
Frequency Range (Hz)	40~70Hz								
Power Factor	>0.99								
Bypass Voltage Range	Max. Voltage: +15% (Optional +5%, +10%, +25%) Min. Voltage: -45% (Optional -20%, -30%)								
Current Harmonic	Frequency protection range: ±10%								
Generator Input	<2% (100% non-linear load)								
Generator Input	Support								
OUTPUT									
Phase	3 Phase 4 Wires and Ground								
Rated Voltage	220/240VAC 380/400/415VAC								
Power Factor	1								
Voltage Precision	±1%								
Output Frequency	±1%, ±2%, ±4%, ±5%, ±10% of the rated frequency (Optional) (50/60±0.2)Hz								
Crest Factor	3:1								
THD	≤1% With Linear Load ≤4% With Non-Linear Load								
Efficiency	95.5%								
COMMUNICATION									
UPS Cabinet	RS232, RS485, Intelligent Slot x 2 (SNMP Card, Relay Card, Dry Contact Optional)								
INTERFACE									
PM Series UPS Module	RS232								
BATTERY									
Voltage	±192V / ±204V / 216V ± / 228V / ± 240V DC; Battery Quantity (Optional)								
Charge Current (A)	UPS Cabinet	18A Max	30A Max	60A Max	100A Max	130A Max	200A Max	260A Max	390A Max
	Module	6A/10A/(20A Optional) Max (Charge Current Can be Set According to Battery Capacity Installed)							
Backup Time	Depends on the Capacity of External Batteries								
Transfer Time	Utility to Battery : 0ms; Utility to bypass: 0ms								
PROTECTION									
Overload	Normal Mode	Load ≤110%: Last 60min, ≤125%: Last 10min, ≤150%: Last 1min, ≥150% Shut Down UPS Immediately							
	Battery Mode	Load ≤110%: Last 10min, ≤125%: Last 1min, ≤150%: Last 1s ≥150% Shut Down UPS Immediately							
OPERATING									
Temperature	0°C ~ 40°C								
ENVIRONMENT									
Humidity	0 ~ 95% non condensing								
Storage Temperature	-25°C ~ 55°C								
Noise	Number of Modules ≤ 5	<55dBA (1m)							
	Number of Modules > 5	<65dBA (1m)							
Altitude	<1500m								
DIMENSIONS									
Unit Dimensions (WxDxH) (mm)	UPS Cabinet	600 x 840 x 1400	600 x 1100 x 2000		1200x860x2000	860 x 3000 x 2000		1100x4800x2000	
	Module	443 x 580 x 131 (3U)							
Weight (kg)	UPS Cabinet	170	270	275	280	514	1600	1810	2800
	Module	10kVA: 26kg; 15kVA: 30kg; 20kVA: 31kg; 25kVA: 31kg; 30kVA: 32kg; 40kVA: 33kg							
INDUSTRY STANDARD									
CE, IEC 62040-2, IEC 62040-1, IEC 62040-3, IEC61000-4, IEC60950-1									

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