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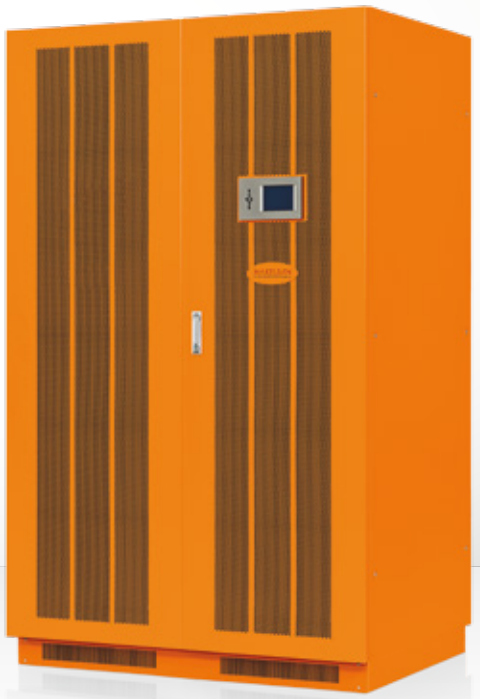
PM
SERIES

10-2080 kVA 3:3 PHASE
MODULAR ONLINE UPS



kW=kVA

96% Efficiency

VFI TYPE — UPS ONLINE
MODULAR SYSTEM
PF= 1.0 — POWER FACTOR
Service — SERVICE

DATA CENTER
MEDICAL
TRANSPORT
INDUSTRY
EMERGENCY

HIGHLIGHTS

- High Performance, Modular 3-Phase Power Protection
- Scalable up to 2080kVA, with 96% High Efficiency

Modular UPS Design for High Density Data Centers

- 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.
- True Online Double Conversion and advanced DSP control technology.
- Modular Architecture can scale power and runtime as demand grows or as higher levels of availability required.
- Combines the modular design with the N+X parallel redundancy technology.
- The maximum capacity of a single cabinet is 520kVA. Cabinets can operate in parallel configuration to build a system of up to 2080kVA.

Higher Level of Efficiency than the EU CoC for AC UPS
CE TSE TSE-HYB

POWER FORLIFE

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Scalable Modular Architecture

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

- Capacity of single power module is 10-15-20-25-30-40-50kVA
- The height of single hot swappable power module is 3U
- Standard 1.4m cabinet can hold up to 5 of power modules
- Standard 2m cabinet can hold up to 13 of power modules
- The single UPS cabinet capacity can reach 520KVA and UPS cabinets can operate in parallel configuration to build a system of up to 2080kVA

Modules	Output Power	Dimensions (WxHxD)	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
PM 3350-RM	50kVA 3/3 Module	443x131x625mm 3U	34kg

"Size What You Need Now and Pay as You Grow"

Standart Electrical Features

- Output Power Factor: 0.9 (Optional 1.0)
- Hot Swappable Maintenance (UPS & Battery)
- Separated Bypass
- Maintenance Bypass
- Parallelable up to 4 Cabinets
- Common Battery
- Control of On/Off State of each Module
- Freely Set the Charge Current
- Intelligent Charging
- Mid or Small Power Distributing System
- Selectable Battery Voltage 3 Input 3 Output ±216VDC/±228VDC/±240VDC (32/34/36/38/40pcs)

Advanced Communication Features

- RS232 (USB)
- RS485 Communication Interface
- SNMP Card (Optional)
- Relay Card (Optional)
- Centralized Monitor Module that is Hot Swappable
- Single Module LCD Display
- Control Monitoring with 5" Color LCD Graphic Display

UPS Cabinet Control Panel

Module Control Panel

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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

3 U Battery Box Optional

19"Matching Battery Cabinets (Optional)

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.

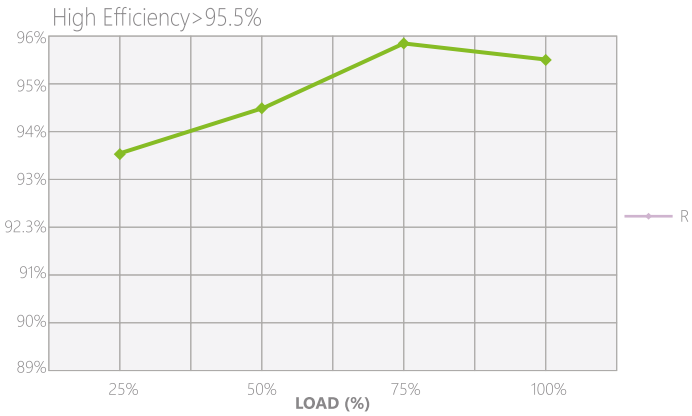
Independent Control System

Every power module is equipped independent control system, and control itself independently according to the sharing message, and the fault module separates from the system automatically.

High Efficiency and Low Total Cost of Ownership

PM Designed for highly economical energy consumption and is a perfect fit in your data center and server room. Offering efficiency of up to 96%, THDi of 2% and unity Input Power Factor without harmonic filters PM delivers:

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



- 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.

10kVA/15kVA/20kVA/25kVA/ 30kVA 3:3 phase

40kVA 3:3 phase

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MODEL													
CAPACITY													
UPS Cabinet		10~100 kVA	20~100 kVA	20~200 kVA	25~250 kVA	30~150 kVA	30~300 kVA	40~200 kVA	40~320 kVA	40~520 kVA	40~800 kVA	40~1040 kVA	40~1560 kVA
Paralleling		Up to 6 Frame	Up to 6 Frame	Up to 6 Frame	Up to 6 Frame	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
PM Module		10kVA/10kW, 15kVA/15kW, 20kVA/20kW, 25kVA/25kW, 30kVA/30kW, 40kVA/40kW, 50kVA/50kW											
INPUT													
Phase		3 Phase 4 Wires and Ground											
Rated Voltage		380/400/415 VAC											
Voltage Range		208~478 VAC or 120 VAC~276 VAC											
Frequency Range (Hz)		40~70 Hz											
Power Factor		>0.99											
Bypass Voltage Range		Max. Voltage: +15% (Optional +5%, +10%, +25%) Min. Voltage: -45% (Optional -20%, -30%)											
		Frequency Protection Range: ±10%											
Current Harmonic		<2% (100% Non-Linear Load)											
Generator Input		Support											
OUTPUT													
Phase		3 Phase 4 Wires and Ground											
Rated Voltage		220/240 VAC 380/400/415 VAC											
Power Factor		1											
Voltage Precision		±1%											
Output Frequceny		(50/60±0.1%) Hz											
Crest Factor		3:1											
THD		≤1% With Linear Load ≤4% With Non-Linear Load											
Efficiency		96%											
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	60A Max	30A Max	60A Max	60A Max	50A Max	100A Max	50A Max	80A 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)											
Crest Factor Backup Time		Depends on the Capacity of External Batteries											
THD Transfer Time		Utilty to Battery : 0ms; Utily 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											
ENVIRONMENTAL													
Operating Temperature		0°C ~ 40°C											
Storage Temperature		-25°C ~ 55°C											
Humidity		0 ~ 95% Non-Condensing											
Noise	Number of Modules ≤5	<55 dBA (1m)											
	Number of Modules >5	<65 dBA (1m)											
Altitude		<1500m											
DIMENSIONS & WEIGHT		10~100 kVA	20~100 kVA	20~200 kVA	25~250 kVA	30~150 kVA	30~300 kVA	40~200 kVA	40~320 kVA	40~520 kVA	40~800 kVA	40~1040 kVA	40~1560 kVA
Unit Dimensions WxDxH (mm)	UPS Cabinet	600x840 x1400	600x840 x1400	600x1100 x2000	600x1100 x2000	600x840 x1400	600x1100 x2000	860x600 x2000	860x600 x2000	860x1200 x2000	860x1800 x2000	860x3000 x2000	1100x4800 x2000
	Module	443 x 580 x 131 (3U)											
Weight (kg)	UPS Cabinet	170	170	270	275	152	280	205	310	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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