

HPM SERIES

6~1560kVA

1:1 HPM1106 / HPM1110

3:1 HPM3106 / HPM3110

3:3 HPM3310 / HPM3315 / HPM3320 / HPM 3325 / HPM3330 / HPM3340



UPS Cabinet Control Panel



Module Control Panel

Features

Digital control

Adopting digital control design, and the control system is more reliable

19inch standard cabinet

Adopting 19 inch standard cabinet design.

High power density design

Capacity of single power module is 6KVA/10KVA/15KVA/20KVA/25KVA/30KVA/40KVA, the height of all these modules is 3U. Numbers of power modules is up to 5 for the 1.4 meter high cabinet, numbers of power modules is up to 13 for the 2 meter high cabinet. The power of system ranged from 6KVA to 520KVA corresponds to the number of parallel power modules from 1 to 13, power of the system ranged from 800KVA to 1280KVA corresponds to power modules from 20 to 32 by analogy. All of the power modules is hot swappable.

Parallel expansion cabinet

Support parallel expansion for cabinet, and parallel expansion is up to 4 cabinets.

N+X parallel redundancy

Redundant power modules can be configured flexibly. If the redundant power is up to 2 or above, module reliability of the system is up to 99.999%, and the MTBF (Mean Time Between Failures) is more than 250000 hours.

Redundant 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.

Distribute current joint cabinet

Distribute current joint layout, ensures the safety of parallel system.

Sharing the batteries

The batteries can be shared by the parallel UPS power modules or cabinet.

Voltage of batteries can be configured flexibly

1 input 1 output / 3 input 1 output $\pm 96Vdc / \pm 108Vdc / \pm 120Vdc$ (16/18/20PCS) selectable;

3 input 3 output $\pm 216Vdc / \pm 228Vdc / \pm 240Vdc$ (32/34/36/38/40PCS) selectable

Intelligent charging mode

Charging current can be configured, there are 3 charging mode which are constant current mode, constant voltage mode, floating charging mode, and the charging mode can be transfer smoothly.

Battery module or battery cabinet can be selectable

Battery module is 3U standard rackmount and can contain 18 pieces of 7Ah batteries or 9Ah ones;

Appearance of customized battery cabinet is the same with the UPS.

LCD display

Cabinet is equipped with large touch screen of which language can be chosen as English or Chinese. Each power module is equipped with LCD orled.

Maintenance bypass

The UPS is equipped with Maintenance bypass.

EPO function

Emergency power off function.

Intelligent management

RS232 (USB) / RS485 communication interface.

SNMP card (optional)

Relay card (optional)

Centralized monitor module that is hot swappable.



6kVA / 10kVA 1:1 phase
6kVA / 10kVA 3:1 phase



40kVA 3:3 phase



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

single module(3U)



Battery Cabinets (Optional)



3 U Battery Box Optional

Technical Specifications:

MODEL		HPM1106-30KVA	HPM1110-50KVA	HPM3106-30KVA	HPM3110-50KVA	HPM3110-100KVA	HPM 3320-60KVA	HPM3320-100KVA	HPM3320-200KVA	
Capacity (VA/watts)	UPS cabinet	6~30k / 4.8~24k	6~50k / 4.8~40k	6~30k / 4.8~24k	6~50k / 4.8~40k	6~100k / 4.8~80k	10~60k / 9~54k	10~100k / 9~90k	10~200k / 9~180k	
	HPM module	6k / 4.8k, 10k / 8k				10k / 9k, 15k / 13.5k, 20k / 18k				
INPUT										
Nominal voltage		220/230Vac		380/400Vac (3Ph+N+PE)or 220/230Vac			380/400/415Vac, (3Ph+N+PE)			
Operating voltage range		120~276Vac		208~478Vac or 120~276Vac			208~478Vac			
Operating frequency range		40~70Hz								
Power factor		≥0.99								
Bypass voltage range		Max.voltage: 220v +25%(optional +10%,+15%,+20%) 230v 20% (optional +10%,+15%) 240v 15%(optional +10%) Min. voltage: -45% (optional -20%,-30%) Frequency protection range: ±10%								
Harmonic distortion (THDi)		5%(100% non-linear load)				2%(100% nonlinear load)				
Generator input		Support								
OUTPUT										
Output voltage		220/230Vac				380/400/415Vac, (3Ph+N+PE)				
Voltage regulation		±1%								
Power factor		0.8				0.9/1 (Customized)				
Output frequency		1.Line Mode: ±1%、±2%、±4%、±5%、±10% of the rated frequency (optional) 2.Battery Mode: (50/60±0.1%)Hz								
Crest factor		3:1								
Harmonic distortion (THD)		≤2% with linear load ≤5% with non linear load								
Efficiency		93.5%				95.5%				
BATTERY										
Battery voltage		±96\ ±108\ ±120Vdc; battery quantity(optional)				±192\ ±204\ ±216\ ±228\ ±240Vdc; battery quantity(optional)				
Charge Current	UPS cabinet	30A (Max.)	60A (Max.)	30A (Max.)		60A (Max.)	18A(Max)	30A (Max.)	60A (Max.)	
	HPM module	6A (Max.) (charge current can be set according to battery capacity installed)								
Backup time		Depends on the capacity of external batteries								
SYSTEM FEATURES										
Transfer time		Utility to Battery : 0ms; Utility to bypass: 0ms								
Overload	Line Mode	Load ≤110%: last 60min, ≤125%: last 10min, ≤150%: last 1min, ≥150% turn to bypass mode immediately								
	Bat. Mode	Load ≤110%: last 30S, ≤125%: last 1S, ≤150%: last 200ms, ≥150% shut down UPS immediately				Load ≤110%: last 10min, ≤125%: last 1min, ≤150%: last 1S, ≥150% shut down UPS immediately				
	Bypass Mode	Breaker (6kVA:40A / 10kVA:60A)				Breaker (10kVA: 20A / 15kVA: 32A / 20kVA:40A)				
Short circuit		Hold whole system								
Noise suppression		Complies with EN62040-2								
Communication interface		1. UPS cabinet : RS232, RS485, Dry Contact, Intelligent slot x 2(SNMP card,Relay card optional) 2. HPM series UPS module: RS232								
ENVIRONMENTAL										
Operating temperature		0 ~ 40°C								
Storage temperature		-25 ~ 55°C								
Humidity range		0 ~ 95% (non condensing)								
Altitude		<1500m								
Noise level		<55dB				<65dB				
PHYSICAL										
Dimension D × W × H (mm)	UPS cabinet	840 × 600 × 1400	840 × 600 × 2000	840 × 600 × 1400		840 × 600 × 2000	840 × 600 × 1400		1100 × 600 × 2000	
	HPM module	443×580×131 (3U)								
Net weight (Kg)	UPS cabinet	138	150	138	150	213	149	152	290	
	HPM module	6kVA/23; 10kVA/25				10kVA/26; 15kVA/30; 20kVA/31				
STANDARDS										
Safety		IEC/EN62040-1,IEC/EN60950-1								
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8								

Specifications are subject to change without prior notice.

Technical Specifications:

MODEL		HPM3325-250KVA	HPM3330-90KVA	HPM3330-150KVA	HPM3330-300KVA	HPM3340-400KVA	HPM3340-520KVA	HPM3340-800KVA	HPM3340-1280KVA	
Capacity (VA/watts)	UPS cabinet	250k / 225k	90k / 81k	150k / 135k	300k / 270k	400k / 360k	520k / 468k	800k / 720k	1280k / 1152k	
	HPM module	25k / 22.5k	25k / 22.5k, 30k / 27k			40k / 36k				
INPUT										
Nominal voltage		380 / 400 / 415Vac, (3Ph+N+PE)								
Operating voltage range		208-478Vac for half load; 305-478Vac for full load								
Operating frequency range		40-70Hz								
Power factor		≥0.99								
Bypass voltage range		Max.voltage: 220V +25%(optional +10%,+15%,+20%) / 230V +20% (optional +10%,+15%) / 240V +15%(optional +10%) Min. voltage: -45% (optional -10%,-20%,-30%) Frequency protection range: ± 10%								
Harmonic distortion (THDi)		3% (100% nonlinear load)								
Generator input		Support								
OUTPUT										
Output voltage		380/400/415Vac, (3Ph+N+PE)								
Voltage regulation		± 1%								
Power factor		0.9								
Output frequency		1.Line mode: ± 1%、± 2%、± 4%、± 5%、± 10% of the rated frequency (optional) 2.Battery mode: (50/60 ± 0.1%)Hz								
Crest factor		3:1								
Harmonic distortion (THDv)		≤2% with linear load ≤5% with non linear load								
Efficiency		95%								
BATTERY										
Battery voltage		± 192/ ± 204/ ± 216/ ± 228/ ± 240Vdc; Battery quantity(optional)								
Charging current	UPS cabinet	60A (Max.)	30A(Max.)	50A(Max.)	100A(Max.)	130A(Max.)	200A(Max.)	260A(Max.)		
	HPM module	6A (Max.)	10A (Max.)							
Backup time		Depends on the capacity of external batteries								
SYSTEM FEATURES										
Transfer time		Utility to battery : 0ms; Utility to bypass: 0ms								
Overload	Line mode	Load ≤ 110%: last 60min, ≤ 125%: last 10min, ≤ 150%: last 1min, ≥ 150% turn to bypass mode immediately								
	Bat. mode	Load ≤ 110%: last 10min, ≤ 125%: last 1min, ≤ 150%: last 1s, ≥ 150% shut down UPS immediately				Load ≤ 110%: last 60min, ≤ 125%: last 10min, ≤ 150%: last 1min, ≥ 150% shut down UPS immediately				
	Bypass mode	40A	Breaker (25kVA:40A / 30kVA:60A)			100A				
Short circuit		Hold whole system								
Noise suppression		Complies with EN62040-2								
Communication interface		1. UPS cabinet : RS232, RS485, Dry Contact, Intelligent slot x 2(SNMP card,Relay card optional) 2. HPM series UPS module: RS232								
ENVIRONMENT										
Operating temperature		0 ~ 40°C								
Storage temperature		-25 ~ 55°C								
Humidity range		0 ~ 95% (non condensing)								
Altitude		<1500m								
Noise level		<70dB				<73dB				
PHYSICAL										
Dimension D × W × H (mm)	UPS cabinet	600 × 1100 × 2000	600 × 840 × 1400		600 × 1100 × 2000	1200 × 850 × 2000	2000 × 850 × 2000	3400 × 850 × 2000		
	HPM module	443x580x131 (3U)								
Net weight (Kg)	UPS cabinet	290	158	170	307	750	860	980	1300	
	HPM module	32	25kVA/32; 30kVA/33.5		36					
STANDARDS										
Safety		IEC/EN62040-1,IEC/EN60950-1								
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8								

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