



# HPM SERIES

**6-1560kVA**

1:1 HPM1106 / HPM1110

3:1 HPM3106 / HPM3310

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

## Product features

- High frequency and double conversion on-line technology  
With fully digitized microprocessor control (DSP)
- Advanced PFC technology
- 3U frame, rack-mounted and tower convertible
- EPO function
- Wide input voltage range
- N+X Parallel redundancy
- Lightning and surge protection, short circuit and overload protection
- Multilingual LCD and LED display
- Smart RS232 communication with monitoring software



พ.ร.บ. 1291-1-1-2553  
พ.ร.บ. 1291-1-2-2553  
พ.ร.บ. 1291-1-3-2553

# HPM SERIES Technical Specifications

MODEL		HPM1106-30KVA	HPM1101-50KVA	HPM3106-30KVA	HPM3110-50KVA	HPM3110-100KVA
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
	HPM module	6k / 4.8k, 10k / 8k				
INPUT						
NOMINAL VOLTAGE		220/230Vac		380/400Vac (Ph+N+PE) or 220/230Vac		
OPERATING VOLTAGE RANGE		120-276Vac		208-478Vac or 120-276Vac		
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)				
GENERATOR INPUT		Support				
OUTPUT						
OUTPUT VOLTAGE		220/230Vac				
POWER FACTOR		0.8				
VOLTAGE REGULATION		± 1%				
OUTPUT FREQUENCY		1.Line Mode:+-1%,+-2%,+-4%,+-5%,+-10% of the rated frequency (optional) 2.Battery Mode: (50/60+-0.1%)Hz				
CURRENT FACTOR		3:1				
HARMONIC DISTORTION (THDv)		≤ 2% with linear load ≤ 5% with non linear load				
EFFICIENCY		93.5%				
BATTERY						
BATTERY VOLTAGE		+96/+108/+120Vdc;battery quantity(optional)				
CHARGE CURRENT	UPS cabinet	30A (Max.)	60A (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				
	Bypass Mode	Breaker (6kVA:40A/10kVA:60A)				
SHORT CIRCUIT		Hold whole system				
NOISE SUPPRESSION		Complies with EN62040-2				
COMMUNICATION INTERFACE		HPM series UPS : 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 x W x H (mm)	UPS cabinet	800 x 600 x 1400	840 x 600 x 2000	840 x 600 x 1400	840 x 600 x 2000	
	HPM module	443 x 580 x 131 (3U)				
NET WEIGHT (Kg)	UPS cabinet	138	150	138	150	213
	HPM module	6kVA/23 ; 10kVA/25				
STANDARDS						
SAFETY		IEC/EN62040-1,IEC/EN60950-1				
EMC		IEC/EN62040-2,IEC/EN61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8				
PRODUCT APPROVAL						
TIS		TIS 1291 NO 1-2553,NO 2-2553,NO 3-2555				
FACTORY APPROVAL						
ISO		ISO 9001:2008,14001:2004				

Specifications are subject to change without prior notice.

# HPM SERIES Technical Specifications

MODEL		HPM3320-60KVA	HPM3320-100KVA	HPM3320-200KVA
CAPACITY (VA / WATTS)	UPS cabinet	6-50k / 4.8-40k	6-30k / 4.8-24k	6-50k / 4.8-40k
	HPM module	10k / 9k, 15k / 13.5,20k / 18k		
INPUT				
NOMINAL VOLTAGE		380/400/415Vac, (3Ph+N+PE)		
OPERATING VOLTAGE RANGE		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)		≤ 2% (100% non-linear load)		
GENERATOR INPUT		Support		
OUTPUT				
OUTPUT VOLTAGE		220/230Vac		
POWER FACTOR		0.9/1 (Customized)		
VOLTAGE REGULATION		± 1%		
OUTPUT FREQUENCY		1.Line Mode:+-1%,+-2%,+-4%,+-5%,+-10% of the rated frequency (optional) 2.Battery Mode: (50/60+-0.1%)Hz		
CURRENT FACTOR		3:1		
HARMONIC DISTORTION (THDv)		≤ 2% with linear load ≤ 5% with non linear load		
EFFICIENCY		95.5%		
BATTERY				
BATTERY VOLTAGE		+-192/+204/+216/+228/+240Vdc;battery quantity(optional)		
CHARGE CURRENT	UPS cabinet	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		
	Bypass Mode	Breaker (6kVA:40A/10kVA:60A)		
SHORT CIRCUIT		Hold whole system		
NOISE SUPPRESSION		Complies with EN62040-2		
COMMUNICATION INTERFACE		HPM series UPS : RS232		
ENVIRONMENTAL				
OPERATING TEMPERATURE		0-40°C		
STORAGE TEMPERATURE		- 25-55°C		
HUMIDITY RANGE		0-95% (non condensing)		
ALTITUDE		<1500m		
NOISE LEVEL		<65dB		
PHYSICAL				
DIMENSION D x W x H (mm)	UPS cabinet	840 x 600 x 1400		1100 x 600 x 2000
	HPM module	443 x 580 x 131 (3U)		
NET WEIGHT (Kg)	UPS cabinet	149	152	290
	HPM module	10kVA/26 ; 15kVA/30 ; 20kVA/31		
STANDARDS				
SAFETY		IEC/EN62040-1,IEC/EN60950-1		
EMC		IEC/EN62040-2,IEC/EN61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8		
PRODUCT APPROVAL				
TIS		TIS 1291 NO 1-2553,NO 2-2553,NO 3-2555		
FACTORY APPROVAL				
ISO		ISO 9001:2008,14001:2004		

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# HPM SERIES Technical Specifications

MODEL		HPM3325-250KVA	HPM3330-90KVA	HPM3330-150KVA	HPM3330-300KVA
CAPACITY (VA / WATTS)	UPS cabinet	250k / 225k	90k / 81k	159k / 135k	300k / 270k
	HPM module	25k / 22.5k	25k / 22.5k,30k / 27k		
INPUT					
NOMINAL VOLTAGE		380/400/415Vac, (3Ph+N+PE)			
OPERATING VOLTAGE RANGE		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)		≤ 3% (100% non-linear load)			
GENERATOR INPUT		Support			
OUTPUT					
OUTPUT VOLTAGE		380/400/415Vac, (3Ph+N+PE)			
POWER FACTOR		0.9			
VOLTAGE REGULATION		± 1%			
OUTPUT FREQUENCY		1.Line Mode:+-1%,+-2%,+-4%,+-5%,+-10% of the rated frequency (optional) 2.Battery Mode: (50/60+-0.1%)Hz			
CURRENT FACTOR		3:1			
HARMONIC DISTORTION (THDv)		≤ 2% with linear load ≤ 5% with non linear load			
EFFICIENCY		95.0%			
BATTERY					
BATTERY VOLTAGE		+-192/+204/+216/+228/+240Vdc;battery quantity(optional)			
CHARGE CURRENT	UPS cabinet	60A (Max.)	30A (Max.)	50A (Max.)	100A (Max.)
	HPM module	6A (Max.)	25kVA:6A(Max.) / 30kVA: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 1s,≥150% Shut down UPS immediately			
	Bypass Mode	Breaker (25kVA : 40A)	Breaker (25kVA:40A/30kVA:60A)		
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)			
ENVIRONMENTAL					
OPERATING TEMPERATURE		0-40°C			
STORAGE TEMPERATURE		- 25-55°C			
HUMIDITY RANGE		0-95% (non condensing)			
ALTITUDE		<1500m			
NOISE LEVEL		<70dB			
PHYSICAL					
DIMENSION D x W x H (mm)	UPS cabinet	600 x 1100 x 2000	600 x 840 x 1400		600 x 1100 x 2000
	HPM module	443 x 580 x 131 (3U)			
NET WEIGHT (Kg)	UPS cabinet	290	158	170	307
	HPM module	32	25kVA / 32; 30kVA / 33.5		
STANDARDS					
SAFETY		IEC/EN62040-1,IEC/EN60950-1			
EMC		IEC/EN62040-2,IEC/EN61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8			
PRODUCT APPROVAL					
TIS		TIS 1291 NO 1-2553,NO 2-2553,NO 3-2555			
FACTORY APPROVAL					
ISO		ISO 9001:2008,14001:2004			

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