LINE UPS



آدرس: تهران – بلوار مرزداران-خیابان ابراهیمی – برج الوند – طبقه ۵ شمالی – واحد ۵۰۱ تلفن : ۴۴۳۸۰۲۷۳ پشتیبانی : ۹۱۹۶۷۸۵۴۱۱



Line Interactive UPS

s series



- 450VA/650VA/850VA/1KVA/1.5KVA/2KVA line interactive UPS
- · Built-in super smart charger, shorten 50% of charging time
- Excellent microprocessor control guarantees high reliability
- · Boost and buck AVR for voltage stabilization
- · Auto restart while AC is recovering
- · Modified sine wave
- · Off-mode charging
- · Cold start function
- Optional USB/RS-232 communication port and RJ-11/RJ-45 protection
- . Offering LED and LCD display for selections

MODEL		S450	S650	S850	S1000	S1500	S2000	
CAPACITY		450VA / 240W	650VA / 360W	850VA / 480W	1000VA / 600W	1500VA / 900W	2000VA / 1200W	
INPUT		•						
Voltage		110/120 VAC or 220/230/240 VAC						
Voltage Range		81-145 VAC / 162-290 VAC						
Frequency Range		60/50 Hz (auto sensing)						
OUTPUT								
AC Voltage Regulation (Batt. Mode)		±10%						
Frequency Range (Batt. Mode)		60 Hz or 50 Hz ±1 Hz						
Transfer Time		Typical 2-6 ms, 10ms max.						
Waveform (Batt. Mode)		Simulated Sine Wave						
BATTERY		'						
Battery Type & Number		12 V/4.5 Ah x 1	12 V/7 Ah x 1	12 V/9 Ah x 1	12 V/7 Ah x 2	12 V/9 Ah x 2	12 V/9 Ah x 2	
Typical Recharge Time		4-6 hours recover to 90% capacity						
PROTECTION		·						
Full Protection		Overload, discharge, and overcharge protection						
INDICATORS								
LCD Display		AC Mode, Batte	ry Mode, Load Level,	Battery Level, Input	Voltage, Output Volt	age, Overload, Fault,	and Low Battery	
LED Display	AC Mode	Green lighting			The right green LED lighting & the 2nd to 5th green LEDs gradually lighting indicating load level			
	Battery Mode	Green flashing			The right green LED flashing & the 2nd to Yellow flashing 5th green gradually lighting indicating battery capacity			
	Fault	N/A			Red lighting			
ALARM	'	•						
Battery Mode		Sounding every 10 seconds						
Low Battery		Sounding every second						
Overload		Sounding every 0.5 second						
Battery Replacem	ent Alarm	Sounding every 2 seconds						
Fault		Continuously sounding						
PHYSICAL	(11 (· · · ·)		007 400 440		050 440 400	007	40005	
Dimension, D x W x H (mm)		0.55	287 x 100 x 142	1.0	350 x 146 x 160	-	46 x 205	
Net Weight (kgs) ENVIRONMENT		3.55	4.25	4.9	8	11.1	11.5	
Humidity				0-90 % RH @ 0- 40	°C (non-condensing)			
Noise Level		0-90 % RH @ 0- 40°C (non-condensing) Less than 40dB						
MANAGEMENT				L633 III	a 100D			
Optional USB/RS	-232 Port		Supports Window	e-2000/2002/VDA/:+	a/2008,Windows ₂ 7,Li	inux Univ andMAC		
Optional USB/RS	-ZUZ FUIL		Supports window	ozzuuurzuuo/AF/VISI	arzooo, vvii luows2/ ,Ll	inux,Onix,andiviAC		

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HP11 Rack series from 1kVA to 3kVA

Complete solutions for IT infrastructures





Microprocessor-based line interactive design

HPR UPS is designed with microprocessor controller for fast response to power disturbances.

Pure sine wave output

With pure sine wave output, HPR series guarantees compatibility for all kinds of loads. It's perfect power protection for versatile applications such as networking, telecom and other mission-critical applications.

User-friendly and easy-shift LCD display

The front panel digital display can be easily shifted through LCD setting to suit the installation format, vertically stand or flat wall mount.

•Rack/Tower design

HPR series is designed in true 2U universalmount case. It can be easily installed as floorstanding tower or in 19-inch rackmount bracket

Built-in boost and buck AVR

With built-in voltage regulator, the UPS will maintain regulated nominal output without using battery power during brownouts and overvoltages.

Output power factor 0.8

HPR is a high-density UPS with output power factor 0.8 to provide higher performance and efficiency to critical applications.

Hot-swappable battery design

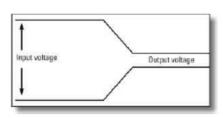
This design ensures clean and uninterruptible power to protected equipment during battery replacement.

•ECO operation for energy saving (Efficiency Corrective Optimizer)

The ECO function allows cost-effective operation of UPS Systems as high as 99%. In this operation mode, load is supplied by the mains. In the event of a mains failure, the inverter takes over the load and provides supply continuity to the connected systems.

·Wide input voltage range

HPR UPS have a very wide input voltage range of up to 110-300V, optimized to improve compatibility with engine generator sets and reduce the numbers of transfer to battery power. The batteries are used only for the most serious incidents, maximizing available backup time and extending battery life.



•Multiple communication available

- -USB port
- -RS-232 port
- -SNMP slot (option)

We also offer free monitoring software, WinPower, downloaded from the internet. This advanced and networking software supports various operating systems and multiple languages.

The solution for

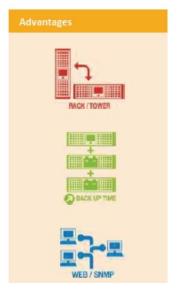
- Professional and IT equipment
- Servers and networking devices
- CAD / graphic workstations with monitors and peripherals
- > Control systems

Technology

VFI "online double conversion"

Certification

> TLC / CQC / CE



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HP11 Tower series-from 1kVA to 3kVA

Complete solution for IT infrastructures



Features

- •1KVA/2KVA/3KVA online UPS
- True double-conversion
- •Accepts dual-mains inputs for special power environment with high Voltage and Low Voltage
- •Complete galvanic isolation design offers full isolation and complete common mode noise rejection
- •Wide input voltage range (176-288VAC) at full load
- •Selectable output voltage at 220VAC or 230VAC or240VAC
- •Input power factor correction 0.99
- •Output voltage regulation $< \pm 1\%$
- •Mini slot for USB / RS-232 / AS400 / SNMP communication
- •Smart battery charger design for optimized battery performance

Technical data

MODEL		HP1101B / H	HP1102B / H	HP1103B / H			
CAPACITY		1000 VA / 800 W	2000 VA / 1600 W	3000 VA / 2400 W			
INPUT	<u> </u>	,		,			
Voltage Range			110 - 300 VAC (Auto sensing)				
Frequency Range		45Hz ~ 55 Hz or 56Hz ~ 65 Hz					
Phase		Single phase with ground					
Power Factor (no	minal output @ full load)	≥ 0.99					
OUTPUT	· · · · · · · · · · · · · · · · · · ·						
Output Voltage		208/220/230/240 VAC					
AC Voltage Regulation (Static)		± 1%					
Frequency Range (Synchronized Range)		48~ 52 Hz or 58 ~ 62 Hz					
Frequency Range (Batt. Mode)		50 Hz ± 0.2 Hz or 60Hz ± 0.2 Hz					
Current Crest Ratio		3:1					
Harmonic Distortion		≦ 2 % THD (Linear Load), ≤ 6 % THD (Non-linear Load)					
Transfer Time	AC Mode to Batt. Mode	Zero					
	AC Mode to Bypass	4 ms (Typical)					
Waveform (Batt. Mode)		Pure sinewave					
EFFICIENCY(Peak)							
AC Mode (@100%	6 RCD load)	88% (Typical); 89% (Peak)	88% (Typical); 89% (Peak)	89% (Typical); 90% (Peak)			
Battery Mode(@1	LOO% RCD load)	90% (Typical); 91% (Peak)	90 % (Typical); 91% (Peak)	91 % (Typical); 92% (Peak)			
BATTERY							
Standard Model	Battery Type	12V / 9Ah	12V / 9Ah	12V / 9Ah			
	Battery Numbers	2	4	6			
	Typical Recharge Time	5 hours recover to 90% capacity					
	Charging Current (max.)	1.0 A					
	Charging Voltage	27.4 VDC ± 1%	54.8 VDC ±1%	82.2 VDC ±1%			
Long-run Model	Battery Type and Numbers		Depending on applications				
	Charging Current (max.)						
	Charging Voltage	41.1 VDC ± 1%	82.2 VDC ±1%	109.6 VDC ±1%			
INDICATORS							
LED Panel			UPS status, Load level, Battery level, and Fault con	ditions			
ALARM							
Battery Mode		Sounding every 4 seconds					
Low Battery		Sounding every second					
Overload		Sounding twice every second					
Fault		Continously sounding					
PHYSICAL							
Standard Model	Dimension,D x W x H(mm)	146*360*227	193*400*327	193*400*327			
Long-run Model	Net Weight (kgs)	10	18	24			
	Dimension,D x W x H(mm)	146*360*227	193*400*327	193*400*327			
	Net Weight (kgs)	6	9	9.5			
ENVIRONMENT_			20.050/31/0.0.40%/				
Operation Humidity		20-95 % RH @ 0- 40°C (non-condensing)					
Noise Level			Less than 50dBA @ 1 Meter				
MANAGEMENT_ Communication			and a 1 / a w Tues a Lemma a Lemma	2.11			
Optional SNMP		RS232 Card / Optional USB Card, SNMP Card, or AS400 Card available Supports Windows2 2000/2003/XP/Vista/2008, Windows2 7, Linux, Unix, and MAC					
		Power management from SNMP manager and web browser					
Ориопаі зічіЛР			rower management from SNIVIP manager and web brow	sei			

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HP11 Tower series-from 6kVA to 20kVA

Complete solution for IT and industrial applications



Features

- True double-conversion on line UPS
- •DSP technology guarantees high performance
- •Output power factor 0.8
- •Standard backup UPS and long backup UPS in one integrated unit
- •Adjustable battery number from 16 pcs to 20 pcs
- •Adjustable charging current via software (0.5A~6A)
- •Wide input voltage range (110-300 VAC)
- •Active input power factor correction 0.99
- •50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- •3-stage extendable charging design for optimized battery performance
- •Maintenance bypass available
- •SNMP/USB/RS-232 communications

MODEL		HP1106B(H)	HP1110B(H)			
PHASE			in / 1 phase out			
CAPACITY		6000 VA / 4800 W	10000 VA / 8000 W			
INPUT						
Voltage Range		110 VAC + 3%	at 50% Load176 VAC ±			
0 0	Low Line Transfer	3% at 100% Load				
		120 VAC ± 3% at 50% Load186 VAC ±				
	Low Line Comeback	3% at 100% Load				
	High Line Loss	300 VAC ± 3%				
	High Line Comeback	290 VAC ± 3%				
Frequency Range		46Hz ~ 54 Hz or 56Hz ~ 64 Hz				
Power Factor			@ 100% load			
OUTPUT						
Output Voltage		208/22	0/230/240VAC			
AC Voltage Regu	lation	208/220/230/240VAC ± 1%				
		± 1% 46Hz ~ 54 Hz @ 50Hz system ; 56Hz ~ 64 Hz @ 60Hz system				
Frequency Range (Synchronized Range) Frequency Range (Batt. Mode)		46H2 ~ 54 H2 @ 50Hz system ; 56Hz ~ 64 Hz @ 60Hz system 50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz				
Current Crest Ratio		3:1 (max.)				
Harmonic Distorti		3 % THD (Linear Load), 6 % THD (Non-linear Load)				
	Bypass to Inverter (Line mode)	0ms				
Transfer Time	Inverter to Bypass (Line mode)	Oms				
Waveform (Batt. I		Pure Sinewave				
EFFICIENCY		1.341				
Line Mode			90%			
Battery Mode		89%				
BATTERY			0976			
Standard Model	Battery Type	12 V / 7 AH	12 V / 9 AH			
Staridard Woder						
	Numbers	16 pcs	16 pcs			
	Typical Recharge Time	9 hours recover to 90% capacity				
	Charging Current	Default: 1.0 A ± 10%, Max.: 2.0A ± 10% Default: 1.0 A ± 10%, Max.: 2.0A ± 10% 218.4 VDC ± 1%				
Lawrence Mardal	Float Charging Voltage					
Long-run Model	Battery Type	Depending on applications				
	Numbers	16-20 pcs (adjustable)				
	Charging Current	Default:4.0 A ± 10%, Max.:8.0A ± 10% Default:4.0 A ± 10%, Max.:8.0A ± 10%				
	Float Charging Voltage	218.4 VDC ± 1% (based on 16 pcs batteries)				
INDICATORS						
LED Panel		UPS status, Load level,	Battery level, and Fault conditions			
ALARM						
Battery Mode		Sounding every 4 seconds				
Low Battery		Sounding every second				
Overload		Sounding twice every second				
Fault		Continu	ously sounding			
PHYSICAL						
Standard Model	Dimension, D x W x H(mm)	530 x 250 x 608	530 x 250 x 608			
		57	65			
Long-run Model	Net Weight (kgs)					
	Dimension, D x W x H(mm)	515 x 245 x 455 18	515 x 245 x 455 20			
NVIRONMENT	Net Weight (kgs)	10	ZU			
	4.	0.050/ 81/ 0.0	4000 (
Operation Humidity		0-95 % RH @ 0-40°C (non-condensing)				
Noise Level		Less than 55dBA @ 1 Meter	Less than 58dBA @ 1 Meter			
MANAGEMENT						
Smart RS-232		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC				
Optional SNMP		Power management from SNMP manager and web browser				

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