



HR SERIES ONLINE UPS



1KVA-60KVA

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HR SERIES ONLINE UPS



1KVA~3KVA UPS

DESCRIPTION

- Professional design is specifically customized for small and medium enterprise servers, rackmount, tower mount, etc. A variety of installation, Online Double conversion Design, DSP Digital Technology, Pure Sine Wave, Excellent Performance, High-Grade appearance, which present the integration of advanced technology and traditional products.

FEATURES

- Load power factor 0.8, adaptive for the development trend of electrical Equipment and the load capacity is more strong
- Active input power factor correction (PFC), input power factor is over 0.98 Wide input voltage and frequency range, adaptive for extreme adverse grid environment or remote areas
- It can be connected with generators
- Zero transfer time effective ensures the safety and reliability of load operation.

SPECIFICATION

- High frequency and Double Conversion Online Technology
- Fully Digitized Microprocessor Control
- Wide input voltage range
- LCD Display
- UPS start-up without battery (optional)
- Cold Start
- Advanced Battery Management
- Automatic Battery Charging in UPS Off Mode Lightning and Surge Protection (optional) Short Circuit and Overload Protection
- Fan speed adjusted by load automatically
- Network / Fan / Modem Surge Protection (optional)
- Optional Extension Battery Rack Battery Voltage Display
- Load capacity display
- EMI / RFI Noise Filter
- Smart RS232 communication with monitoring software
- Optional SNMP Card Slot
- Input L and N reserved alarm function

HR SERIES ONLINE UPS

• TECHNICAL DATA

Model		HR1K	HR1K (L)	HR2K	HR2K (L)	HR3K	HR3K (L)
Capacity		1000VA	1000VA	2000VA	2000VA	3000VA	3000VA
Input	Voltage	120~295V					
	Frequency	45-65Hz Auto Sensing					
	Power Factor	≥98%					
Output	Voltage	220VAC±1%					
	Frequency	50/60Hz ± 0.05% (battery mode)					
	Efficiency	>99%					
	Power Factor	0.8/0.9 (optional)					
	Crest Factor	>3:1					
	Distortion THD	Non-Linear Load THD < 5% ; Linear Load THD < 3%					
	Overload	< 105% 10 min ; 105% - 130% 1 min ; > 130% 200ms					
Battery	Type	Value Controlled Sealed Lead-Acid Battery					
	DC Voltage	24VDC/36VDC		72VDC		72VDC/96VDC	
	Quantity for Standard Type	12V/7AH x 2 pcs		12V/7AH x 4 pcs	12V/7AH x 6 pcs	12V/7AH x 6 pcs	12V/7AH x 8 pcs
	Charging Current	1A/2A (4A,6A)		1A/2A (4A,6A)		1A/2A(4A,6A)	
Transfer Time	AC Fault	0ms					
	Over Temperature	<4ms					
Protection	Short Circuit	Shut Off Inverter and Bypass Output					
	Over Temperature	Transfer to Bypass Output Automatically					
Display	LCD	Input Voltage, Output Voltage, Current, Frequency, Battery Voltage & Charging Current, Fault, Alarm					
	LED	UPS Status					
Alarm	Battery Low Voltage	Alarm Each Second					
	UPS Overload	Alarm Continually					
	UPS Fault	Alarm Continually					
Communication Interface		RS232 (SNMP & USB Optional)					
Environment	Temperature	0°C-40°C					
	Humidity	≤95%					
	Noise (within 1 meter)	<45dB			<50dB		
Weight (Net Weight)		11 kg / 6.75 kg		17.2 kg / 19.2kg	9.6 kg / 10.6 kg	22.2 kg / 24.2 kg	10.3 kg / 12.3 kg
Dimension WxDXH (mm) for UPS		145 x 350 x 220		590 x 440 x 85	420 x 440 x 85	590 x 440 x 85	420 x 440 x 85

HR SERIES ONLINE UPS



6KVA~10KVA (1/1 PHASE)
10KVA~20KVA (3/1 PHASE)

FEATURES

- High frequency and Double Conversion Online Technology
- Fully digitized microprocessor control
- Wide input voltage range
- LCD Display
- UPS start-up without battery (optional)
- Cold Start
- Advanced Battery Management
- Automatic Battery Charging in UPS Off Mode
- Lightning and Surge Protection (optional)
- Short Circuit and Overload Protection
- Fan speed adjusted by load automatically
- Network / Fax / Modem Surge Protection (optional)
- Optional extension battery pack
- Battery voltage display
- Load capacity display
- EMI/RFI noise filter
- Smart RS232 communication with monitoring software
- Optional SNMP Card Slot
- Input L and N reversed alarm function
- EPO function (optional)

HR SERIES ONLINE UPS

• TECHNICAL DATA

Model		HR6K(L)	HR10K(L)	HR3110K(L)	HR3115K(L)	HR3120K(L)
Capacity		6000VA	10,000VA	10,000VA	15,000VA	20,000VA
N + X Parallel (up to 3 pcs)						
Input	Voltage	120VAC-280VAC		304VAC-475VAC		
	Frequency	45-55Hz (55-65Hz) Auto Sensing				
	Power Factor	>99%				
Output	Voltage	220VAC±1%				
	Frequency	50/60Hz ± 0.2% (battery mode)				
	Distortion THD	Non-Linear Load THD < 5% ; Linear Load THD < 3%				
	Overload	105%-125% 1 min, 125%-150% 30s, > 150% 0.5s				
	Crest Factor	>3:1				
	Power Factor	0.8/0.9				
	Efficiency	>91%		>0.90%		
	Dynamic Response	Full Load ± 3%				
	Wave Form	Sine Wave				
Battery	Type	Value Controlled Sealed Lead-Acid Battery				
	DC Voltage	192VDC				
	Quantity for Battery	12V/7AH x 16 (pcs)				
	Charging Current	2A/4A				
Transfer Time	AC Fault	0ms				
	Over Temperature	0ms				
Protection	Short Circuit	Shut Off Inverter and Bypass Output at The Same Time				
	Over Temperature	Transfer to Bypass Output Automatically				
Display	LCD	Input Voltage, Output Voltage, Current, Frequency, Battery Voltage & Charging Current, Fault, Alarm				
	LED	UPS Status				
Alarm	Battery Low Voltage	Alarm Every Second				
	AC Fault	Alarm Every 4 Second				
	UPS Overload	Alarm Continually				
	UPS Fault	Alarm Continually				
Communication Interface		RS232 (SNMP Optional)				
Environment	Temperature	0°C-40°C				
	Humidity	≤90%				
	Noise (within 1 meter)	<50dB			<55dB	
Weight (Net Weight)		18Kg	20Kg	27Kg	35kg	
Dimension WxDXH (mm) for UPS		445 x 615 x 130 (3U)			445 x 615 x 260 (6u)	

HR SERIES ONLINE UPS



FEATURES

- True Double-Conversion
- LCD Screen Auto-Rotation with Rack position (only for 10K-30K models)
- DSP Technology Guarantees High Performance
- Output Power Factor 1
- Active Power Factor Correction in all phases
- 50Hz/60Hz Frequency Converter Mode
- ECO Mode Operation for Energy Saving (ECO)
- Emergency Power Off Function (EPO)
- Generator Compatible
- Supports Dual AC Inputs
- Adjustable Battery Numbers
- Parallel Operation with Common Battery
- Optional isolation transformer offers full isolation and complete common mode noise rejection

HR SERIES ONLINE UPS

• SPECIFICATION

Model	HR30K(L)	HR40K(L)	HR60K(L)
Phase	3-Phase In / 3-Phase Out		
Capacity	30KVA/30KW	40KVA/40KW	60KVA/60KW
Parallel Capability	4		
Input			
Nominal Voltage	3 x 400 VAC (3Ph+N) or 208/220/230/240 VAC (Ph-N)		
Voltage Range	190-520 VAC (3-Phase) @ 50% Load; 305-478 VAC (3-Phase) @ 100%		
Frequency	45~54Hz or 56~64Hz		
Power Factor	≥ 0.99 @ 100% Load		
Output			
Output Voltage	3 x 360/380/400/415VAC (3Ph+N) or 208/220/230/240 VAC (Ph-N)	3 x 360/380/400/415VAC (3Ph+N)	
AC Voltage Regulation (Batt. Mode)	±1%		
Frequency Range (Synchronized Range)	46~54Hz or 56~64Hz		
Frequency Range (Batt. Mode)	50Hz ± 0.1Hz or 60Hz ± 0.1Hz		
Current Crest Ratio	3:1 (Max).		
Harmonic Distortion	≤2% THD (Linear Load); ≤5% THD (Non-Linear Load)		
Transfer Time	AC Mode to Battery Mode	0	
	Inverter to Bypass	0	
Waveform (Batt. Mode)	Pure Sinewave		
Overload	AC Mode	100-110% for 60 min, 110-125% for 10 min, 125%-150% for 1 min; >150% immediately	
	Battery Mode		
Efficiency			
AC Mode	95.50%		
ECO Mode	98.50%		
Battery Mode	94.50%		
Battery			
Battery Type	Depending on the applications		
Battery Numbers	32-40 pcs (Adjustable)		
Charging Current (Max.)	1A~12A (Adjustable)	1A~16A (Adjustable)	1A~18A (Adjustable)
Charging Voltage	+/-13.65 VDC x N(N-16~20)		
Physical			
Dimension (DxWxH) mm	682x438x133 (3U)	797x438x176 (4U)	
Net Weight (KG)	29	40	45
Environment			
Operating Temperature	0-40°C		
Operating Humidity	<95% and non-condensing		
Noise Level	Less Than 65dB @ 1 Meter	Less Than 70dB @ 1 Meter	
Management			
SMART RS232/USB	Supports Windows@Family, Linux and MAC		
Optional SNMP	Power Management from SNMP Manager and Web Browser		