

BH-X Series HF Online UPS (1-20KVA 1/1 or 3/1 Phase)

System Introduction

BH Series is a double conversion 1/1,3/1 Phase pure online UPS with High Efficiency Rate. It has been designed for mainstream double conversion system with advanced UPS processing control and high adaptive to all kinds of environment. It is also manufactured with advanced SMT international standard, which provide outstanding stability and reliability.





System Features

High Performance Index

- ◆ Latest HF switching power supply rectifier and PFC Technology. Input Power Factor 0.99, THDI≤3.5%
- ♦ Wide Input Range from 160~300Vac on full load (100% Load, If Load is below 50%, it can be reached even equal or lower than 115Vac) On 3 Phase Model Input range is from 304 ~ 478 Vac.
- ◆ Latest IGBT technology to achieve high overall efficiency up to 90%. Compatible with 220/230/240V and 50/60 Hz Grid Supply Systems.
- ◆ Powerful overload ability with output short circuit protection technology: 1-3 KVA: 120% overloads for 1 minute.150% for 60ms transfer to bypass and alarm. 6-10KVA: 105-130% overload for 10 minutes,
 - >130% overload for 60ms.
- ◆ Can be connected with all kinds of generators to save customers costs.
- ◆ Intelligent temperature compensator and low wave charger can extend battery lifetime.
- ◆ Intuitive dual LCD and LED display panels, which comprehensively and intuitively reflect the state of power system statuses, parameters, and other information. Users can modify and operate based on individual needs on these friendly displays.
- 19" inch Rack Mount/Tower structure design. It can be compatible with standard communication cabinet to greatly save data room spaces.

Safe and Reliable

- ♦ BH Series adapts UPS new controlling software technology to control UPS all processes to increase system reliability.
- BH Series adapts sensitive peak current protection circuit to protect the system from damages due to short-circuit, cold load impacts.
- ♦ 90% of system components are from international famous brands. Systems will fully tested for 24 hours before leaving the factory.

Rich Optional Accessories

BH Series can use SNMP Network Adapter, RS485/Dry Contact, USB port, and EPO function to build up a remote control and monitoring system.

Compatible applications/loads



Specification

Model	BH10S E	3H10L	BH20S	BH20L	BH30S		BH60S	BH60L	BH100S	BH100L	BH100L31	BH150L31	BH200L31	
Capacity	1KVA/0.8	ĸw	2KVA/1.	6KW	3KVA/2.	4KW	6KVA/4	8KW	10KVA	/8KW	10KVA/8KW	15KVA/12KW	20KVA/16K	
	н	ost Mac	hine Specif	ication										
UPS Structure	D	ouble Co	onversion Hig	h Frequen	cy Online									
Appearance	Tower or Rack-Mount Type													
Overall Efficiency (AC-AC)	>	90%												
Noise(In 2 meters)	<	50dB												
Working Temp	0-	-40℃												
Storage Temp	-15 ~ 60°C(Without BATs)													
Humidity	< 95% Non Condensing													
Safety Standard			5; EN62040-											
EMC Standard	EN 50091-1/2, EN62040-2													
					an Utility Po	wer Voltag	e High/low, B		High/low					
Protections		one	onon-oncor	i, over ten	ip., ounty i o	wer vonag	e riigii/iow, b	AT voltage		Available				
Parallel Redundancy Generator Compatibility		vailable								Available				
DC Start		vailable												
Manual Maintenance Bypass		one									Optio	nol		
Display			LIPS Status	INV Statu	s Bynass Sta	atus RATS	tatus, BAT %	Load % E	ault Messari	20	Optio	IIdi		
Alarm		uto	or o otatus,	INV Statu	s, Dypass old	atus, DAT C	natus, DAT 70	, LUAU 70, I	aun messagi	53				
Mute		uto												
Muto			Specificatio											
Input Voltage Bange			1:160~300Vac		1.115-200\/o	`		175 ~ 28	20\/ee		2	04 ~ 478Vac		
Input Voltage Range					u. 115-300 val	,		175~20	ovac		3	04 ~ 476 Vac		
Input Frequency Range Input PF		5-65HZ .99	(Auto Trackir	ng)										
THDI														
וחחו		5%	pecificatio											
Output Maltana			pecification											
Output Voltage		20Vac	41 I											
Output PF		.8/0.9 op												
Output Voltage Regulation	22	20Vac±	1% (Static Lo	bad) ; 220)Vac±2% (5	0-0% Sudo	len Change)	; 220Vac±	±3% (100-0%	6 Sudden C	hange)			
Output Freq.(Online Mode)	N	/hen 46⊦	lz ≤Input Fr	eq.≤ 54Hz	z, Input Freq	.=Output F	req.; When	Input Freq	.<46Hz or >5	4Hz, Locke	d at 50Hz			
Output Freq. (BAT Mode)	50	0Hz± 0.	2%											
Output Waveform	Р	ure Sine	wave											
Distortion	<	1% (Lin	ear Full Load) , < 3%	100% Non-L	inear Load	i)							
								> 120% · M	More than 1 m	nin				
Overload	 > 125%: More than 1 min > 120%: More than 1 min > 150%: 300 ms transfer to bypass > 150%: 300 ms transfer to bypass 													
Crest Ratio										21				
Efficiency	3:1 >90%													
Short-Circuit			to Protection	Output V/c	ltogo/Curror	+ 0								
						11.0								
Output Abnormal			It Auto-Locke	a Protectio	חו									
Noise Suppression			/ave filter											
BAT Low	S	hutdown	Protection											
Dynamic Response			load , recove	ering in 20	ms									
Auto-Restart	Available													
Software Control		vailable												
	Bj	ypass Sp	pecification											
		ms												
Static Bypass Transfer Time	01													
Static Bypass Range		0Vac± 5%	%~285Vac±5	%										
Static Bypass Range	80 21	ms												
Static Bypass Range	80 21 Bi	ms attery S	pecificatio	า										
Static Bypass Range	80 21 Bi	ms attery S		า	ree									
Static Bypass Range Bypass -> INV Transfer Time Type	80 21 Bi St	ms <mark>attery S</mark> ealed Le	pecificatio	า	ree 12V/7Ah×6/8P		12V/7Ah×16P				12V/7Ah×16 Pier	ces		
Static Bypass Range Bypass -> INV Transfer Time Type	80 21 Bi St	ms <mark>attery S</mark> ealed Le	pecification ad Acid Main	า			12V/7Ah×16P 5-15min		5-15min		12V/7Ah×16 Pie	ces		
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units	80 21 81 81 81 81 81 12V/7Ah×2/3P 5-15min	ms <mark>attery S</mark> ealed Le	<mark>pecificatio</mark> ad Acid Main 12V/7Ah×4/6P	า	12V/7Ah×6/8P	96Vdc		192Vdc	5-15min 192Vdc	192Vdc	12V/7Ah×16 Pier 192Vdc	ces 192Vdc	192Vdc	
Static Bypass Range Bypass -> INV Transfer Time Type td. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units	80 21 81 81 81 81 81 12V/7Ah×2/3P 5-15min	ms <mark>attery S</mark> ealed Le	pecification ad Acid Main 12V/7Ah×4/6P 5-15min	1 tenance F	12V/7Ah×6/8P 5-15min	96Vdc	5-15min 192Vdc	192Vdc					192Vdc	
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units std. Model Charging Current	80 21 24 24 25 24/36Vdc 3	ms attery S ealed Le 36Vdc	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc	tenance F 72Vdc	12V/7Ah×6/8P 5-15min 72/96Vdc		5-15min		192Vdc	192Vdc	192Vdc	192Vdc		
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units std. Model Charging Current	86 21 86 12V/7Ah×2/3P 5-15min 24/36Vdc 3 1A	ms attery S ealed Le 36Vdc 4A	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A	tenance F 72Vdc 4A	12V/7Ah×6/8P 5-15min 72/96Vdc 1A	96Vdc 4A	5-15min 192Vdc	192Vdc 4A	192Vdc				192Vdc 2.5A	
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units Std. Model Charging Current Ext. Model Charging Current	8(22) 21 24 25 12V/7Ah×2/3P 5-15min 24/36Vdc 3 1A 1A	ms attery S ealed Le 36Vdc 4A ommun	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A ication Spe	1 tenance F 72Vdc 4A cification	12V/7Ah×6/8P 5-15min 72/96Vdc 1A	4A	5-15min 192Vdc 1A		192Vdc	192Vdc	192Vdc	192Vdc		
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units Std. Model Charging Current Ext. Model Charging Current Communication Port	86 21 35 51 20/7Ah×2/3P 5-15min 24/36Vdc 3 1A 1A CC R	ms attery S ealed Le 36Vdc 4A ommun s232 (St	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A ication Spe d.) ; /SNMP/	1 tenance F 72Vdc 4A cificatior RS485/ Dr	12V/7Ah×6/8P 5-15min 72/96Vdc 1A y Contact (4A Optional Ac	5-15min 192Vdc 1A ccessory)	4A	192Vdc 1A	192Vdc 2.5A	192Vdc	192Vdc		
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units Std. Model Charging Current Ext. Model Charging Current	88 21 83 54 12V/7Ah×2/3P 5-15min 24/36Vdc 3 1A 1A C C R R	ms attery S ealed Le 36Vdc 4A ommun s232 (St lulti-func	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A ication Spe d.) ; /SNMP/ tional Monito	n tenance F 72Vdc 4A cification RS485/ Dr pring Syste	12V/7Ah×6/8P 5-15min 72/96Vdc 1A y Contact (4A Optional Ac	5-15min 192Vdc 1A	4A	192Vdc 1A	192Vdc 2.5A	192Vdc	192Vdc		
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units Std. Model Charging Current Ext. Model Charging Current Communication Port	88 21 83 54 12V/7Ah×2/3P 5-15min 24/36Vdc 3 1A 1A C C R R	ms attery S ealed Le 36Vdc 4A ommun s232 (St lulti-func	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A ication Spe d.) ; /SNMP/	n tenance F 72Vdc 4A cification RS485/ Dr pring Syste	12V/7Ah×6/8P 5-15min 72/96Vdc 1A y Contact (4A Optional Ac	5-15min 192Vdc 1A ccessory) le Status, BA	4A T Fault, Re	192Vdc 1A mote Control	192Vdc 2.5A	192Vdc	192Vdc		
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units Std. Model Charging Current Ext. Model Charging Current Communication Port	88 21 83 54 12V/7Ah×2/3P 5-15min 24/36Vdc 3 1A 1A C C R R	ms attery S ealed Le 36Vdc 4A ommun s232 (St lulti-func hysical	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A ication Spe d.) ; /SNMP/ tional Monito	1 tenance F 72Vdc 4A cification RS485/ Dr rring Syste	12V/7Ah×6/8P 5-15min 72/96Vdc 1A y Contact (4A Optional Ac	5-15min 192Vdc 1A ccessory) le Status, BA	4A T Fault, Re 5/10K Std.:	192Vdc 1A mote Control 500×240×6	192Vdc 2.5A	192Vdc 2.5A	192Vdc	2.5A	
Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units Std. Model Charging Current Ext. Model Charging Current Communication Port Remote Software Tower Size mm(D×W×H)	88 21 38 38 39 30 30 30 30 30 30 30 30 30 30 30 30 30	ms attery S ealed Le 36Vdc 4A ommun s232 (St lulti-func hysical <220	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A ication Spe d.) ; /SNMP/ tional Monite Parameters	1 tenance F 72Vdc 4A cification RS485/ Dr oring Syste 345×11	12V/7Ah×6/8P 5-15min 72/96Vdc 1A y Contact ((m, Online an 96×345	4A Optional Ad d BAT Moo	5-15min 192Vdc 1A ccessory) le Status, BA	4A T Fault, Re 5/10K Std.:	192Vdc 1A mote Control 500×240×6 500×250×4	192Vdc 2.5A 16 50	192Vdc 2.5A	192Vdc 2.5A 500×248×61	2.5A	
Static Bypass Range Bypass -> INV Transfer Time Type Std. Model Rated Volts/Units Backup time Ext. Model Rate Volts/Units Std. Model Charging Current Ext. Model Charging Current Communication Port Remote Software	88 21 38 38 39 30 30 30 30 30 30 30 30 30 30 30 30 30	ms attery S ealed Le 36Vdc 4A ommun s232 (St lulti-func hysical <220 7.5	pecification ad Acid Main 12V/7Ah×4/6P 5-15min 48/72Vdc 1A ication Spe d.) ; /SNMP/ tional Monito	1 tenance F 72Vdc 4A cification RS485/ Dr orring Syste 345×11 12	12V/7Ah×6/8P 5-15min 72/96Vdc 1A y Contact ((m, Online an	4A Optional Ac	5-15min 192Vdc 1A ccessory) le Status, BA	4A T Fault, Re 5/10K Std.: 5/10K Ext.: 18	192Vdc 1A mote Control 500×240×6	192Vdc 2.5A	192Vdc 2.5A 2.27	192Vdc 2.5A	2.5A 6 35	

Note:Specification are subject to change without further notice.





