



The ultimate in clean power

A Group brand | 

NUMERIC[®]

Digital HPH-HR Series

800 VA - 7.5 kVA

The Most Reliable Sinewave Inverter

Features

- Advanced Microprocessor based design
 - 5 Stage Constant Current Charger
- Fast Action AC Synchronized Transfer Switch
 - Cold Start
 - Input & Output Isolated
- Auto temperature controlled cooling Fan
 - Output short circuit Protection
 - Over Temperature Protection
- Input High / Low Voltage Protection
- Low battery alarm / Low battery shut-down
 - Over Load Protection
 - Compatibility with DG sets



NUMERIC - No.1 UPS Manufacturer in India*

(*Source: Softdisk)



NUMERIC Digital HPH HR Series is a true sine wave inverter that delivers utility grade AC power to operate commonly used AC-powered electronic equipments viz., plasma television sets, entertainment systems, printers, electronics appliances - lights, fans, mixer/grinder, refrigerator, washing machines, air conditioners and much more.

Digital HPH HR series sine wave inverter is designed with advanced microprocessor based control and is equipped with an fast action AC synchronized transfer switch for seamless change over from mains mode to inverter mode during power cuts thereby providing power continuity for the connected equipments. The sine wave inverter ensure quality power and increases the gadget efficiency and life compared to square wave inverter.

Technical Specification

Model No.		Digital HPH HR 800	Digital HPH HR 1000	Digital HPH HR 1400	Digital HPH HR 2000	Digital HPH HR 3000	Digital HPH HR 5000	Digital HPH HR 7500
Capacity	VA/Watt	800VA/640W	1000VA/800W	1400VA/1120W	2.0 KVA/1600W	3.0 KVA/2400W	5.0kVA/4000W	7.5kVA/6000W
Input	Nominal Voltage		220 / 230 / 240 Vac					
	Voltage Range	Acceptable Voltage Range	185 ~ 255V(For UPS mode) ; 120 ~ 275VAC(For Inverter mode)					
		Frequency	40Hz ~ 53Hz Auto Sensing					
		Low Voltage Transfer	185Vac ± 2%(For UPS mode) ; 120Vac ± 2%(For Inverter mode)					
		Low Voltage Return	200Vac ± 2%(For UPS mode) ; 130Vac ± 2%(For Inverter mode)					
		High Voltage Transfer	255Vac ± 2%(For UPS mode) ; 290Vac ± 2%(For Inverter mode)					
		High Voltage Return	240Vac ± 2% (For UPS mode) ; 280Vac ± 2% (For Inverter mode)					
Output	Voltage	190V ~ 245V (Factory-settable)						
	Voltage Regulation (Bat Mode)		< 3% RMS for entire battery voltage range					
	Frequency Regulation	Line Mode	same as AC Mains Input					
		Battery Mode	50Hz ± 0.1Hz					
	Power Factor		0.8					
	Wave Form		Pure Sine Wave					
	Effeciency		>85%					
	Overload Protection	Line Mode	>200%, then Mains ON LED blink continuously					
		Battery Mode	110% ~ 150% for 10sec; >150% for 200ms, then Inverter Shuts Down					
	Short Circuit Protection	Line Mode	FUSE					
Battery Mode		Electronic Circuit						
DC Start	Cold Start	Yes						
Transfer Time	Typical	< 10ms (For Home UPS mode); < 40ms (For Inverter mode)			< 10ms		< 50ms	
Battery	Batery Voltage	12VDC	12VDC	24VDC	36VDC	48VDC	96VDC	180VDC
	Backup Time	Depends on batteries connected						
	Recharging Current	up to 20A			up to 15A			
Control Panel	LCD Display (Optional)	Output Volts, Mains Volts, Battery Volts, Charging Current, Discharging current, Load level, battery Level, System Mode Status(Inverter / Mains) , Battery Status& system Error Message						
	LED Display	Mains ON, Inverter ON, Charged / Charging, Battery Low / Bad, DC High, Over Load, Over Temperature, Battery loose connection, Fuse Fail, Inverter Fault, Phase reversal , Short Circuit						
Audible Alarm	Battery High / Low / Bad, Phase reverse, Over load, Short circuit, MCB fail, Output Bad & Over Temperature, Battery Water Reminder for Battery protection							
Protection Features	Battery Low / High / Bad / Connection Loose / Over charge, Over load, Over Temperature, Short Circuit,Phase reverse, MCB Trip, Battery water reminder for Battery protection				Battery Low / High / Bad / Over charge, Over load, Over Temperature, Short Circuit,Phase reverse, MCB Trip.			
Computer Interface	RS232 (optional)							
Web Interface	SNMP (optional)							
Parameter Re-settable	Output Voltage, Charging Current, Battery Boost Voltage							
Physical	Dimensions (W x H x D) mm	225 X 200 X 420	225 X 200 X 420	225 X 230 X 420	220 X 350 X 440	220 X 350 X 440	230 X 440 X 500	315 X 495 X 555
	Net Weight (Kgs)	18	20.5	25.5	32	34	52	63
Environmental	Operating Temperature	0 - 40°C; 32 -104°F						
	Relative Humidity	0-95% non-condensing						
	Audible Noise	Less than 55dBA (at 1M)						

Load Chart

APPLICATION	LOADS	800VA	1kVA	1.4kVA	2.0kVA	3.0kVA	5kVA	7.5kVA
DOMESTIC / RESIDENTIAL / NURSING HOME / CLINICS	Tube Light-40W	5	5	5	10	10	15	20
	CFL-20W	5	5	5	15	15	15	20
	Fan(ceiling)-60W	2	4	5	5	10	10	10
	Television-21" CRT- 70W		1	1	2	2	2	2
	DVD Player-35W		1	1	1	1	1	1
	Set top Box-DTH-15W		1	1	1	1	1	1
	Music System(max 100W)			1	1	1	1	1
	Printer-Inkjet-120W					1	1	1
	Refrigerator-165 ltr					1	1	1
	Mixer Grinder -200W					1	1	1
	Water Heater-1000W							1
	Exhaust Fan-(max 150W)					1	1	1
	Window AC - 1.0 ton(1000W)						1	
	Split AC - 1.5 ton(1500W)							1
SMALL OFFICE HOME OFFICE	Tube Light-40W	5	5	6	10	10	10	30
	CFL	5	5	6	20	20	20	30
	Fan(ceiling)	3	3	4	5	10	15	20
	Printer-Inkjet		1	1	2	3	5	5
	Fax machine(100W)			1		1	2	2
	Scanner-Office(15W)	1	1	1	1	2	2	2
	AC-1.0ton						1	
	AC - 1.5 ton(1500W)							1

Note: Load may vary for different brands. The above mentioned values are just indicative.

Runtime Chart

800 VA / 640 W (12V DC)		1*150 AH (12V)	1*120 AH (12V)	1*100 AH (12V)	1*65 AH (12V)
Output : 230V /50Hz		Hrs/Mins	Hrs/Mins	Hrs/Mins	Hrs/Mins
	100% Load	1.30	1.15	1.00	0.30
	75% Load	2.15	1.45	1.30	0.45
	50% Load	3.30	2.45	2.15	1.30
	25% Load	8.30	6.20	5.15	3.00
1kVA / 800 W (12V DC)		1*150 AH (12V)	1*120 AH (12V)	1*100 AH (12V)	1*65 AH (12V)
Output : 230V /50Hz		Hrs/Mins	Hrs/Mins	Hrs/Mins	Hrs/Mins
	100% Load	1.15	1.00	0.75	0.25
	75% Load	1.45	1.15	1.00	0.40
	50% Load	2.45	2.15	1.45	1.00
	25% Load	6.30	5.00	4.00	2.30
1.4kVA / 1120 W (24V DC)		2*150 AH (12V)	2*120 AH (12V)	2*100 AH (12V)	2*65 AH (12V)
Output : 230V /50Hz		Hrs/Mins	Hrs/Mins	Hrs/Mins	Hrs/Mins
	100% Load	1.45	1.30	1.10	0.40
	75% Load	2.30	2.00	1.30	1.00
	50% Load	4.15	3.15	2.30	1.30
	25% Load	10.00	7.50	6.00	3.30
2kVA / 1.6 kW (36V DC)		3*150AH(12V)	3*120AH(12V)	3*100AH(12V)	3*65AH(12V)
Output : 230V /50Hz		Hrs/Mins	Hrs/Mins	Hrs/Mins	Hrs/Mins
	100% Load	2:00	1:30	1:15	0:45
	75% Load	2:45	2:00	1:40	1:00
	50% Load	4:00	3:00	2:30	1:30
	25% Load	9:30	7:15	5:50	3:30
3kVA / 2.4 kW (48V DC)		4*150AH(12V)	4*120AH(12V)	4*100AH(12V)	4 *65AH(12V)
Output : 230V /50Hz		Hrs/Mins	Hrs/Mins	Hrs/Mins	Hrs/Mins
	100% Load	1:40	1:15	1:00	0:35
	75% Load	2:20	1:45	1:30	0:50
	50% Load	3:35	2:40	2:10	1:20
	25% Load	8:15	3:15	5:00	3:00
5kVA / 4 kW (96V DC)		8*150AH(12V)	8*120AH(12V)	8*100AH(12V)	8 *65AH(12V)
Output : 230V /50Hz		Hrs/Mins	Hrs/Mins	Hrs/Mins	Hrs/Mins
	100% Load	2:15	1:40	1:20	0:40
	75% Load	3:00	2:20	1:50	1:10
	50% Load	4:45	3:40	3:00	1:45
	25% Load	10:45	8:15	6:35	4:00
7.5kVA / 6 kW (180V DC)		15*150AH(12V)	15*120AH(12V)	15*100AH(12V)	15 *65AH(12V)
Output : 230V /50Hz		Hrs/Mins	Hrs/Mins	Hrs/Mins	Hrs/Mins
	100% Load	3:00	2:15	1:35	1:00
	75% Load	4:00	3:00	2:30	1:30
	50% Load	6:15	4:45	3:50	2:15
	25% Load	14:00	10:45	8:35	5:15

Note: Back-up time mentioned are only approximate.

The actual back-up time may vary depending on power consumption of the load connected, Battery type and age of the batteries