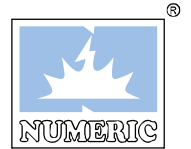



# NUMERIC<sup>®</sup>

*HPE i 33 Series*

10 kVA to 120 kVA



The ultimate in clean power

A Group brand | 



## High Performance Power Protection UPS Systems

### Features

- Flexible and adaptable
- IGBT Rectifier
- High Efficiency up to 94 % for On - Line mode and up to 98 % for Eco Mode
- Compact footprint
- Intuitive monitoring
- High availability architectures
- Online / Frequency Converter / Eco and Intelligent Eco modes of operations
- Designed Load PF 0.9

**NUMERIC - No. 1 UPS Manufacturer in India\***

(\*Source: Softdisk)



## HPE i 33 10-120 kVA

NUMERIC HPE i 33 10-120 kVA UPS is a true on-line 3/ 3 UPS System with VFI-SS-111 (Voltage and Frequency Independent) classification in compliance with IEC EN 62040-3 Standards that provides the user with clean power for continuous operation of critical load, regardless of any disturbance on the upstream AC power.



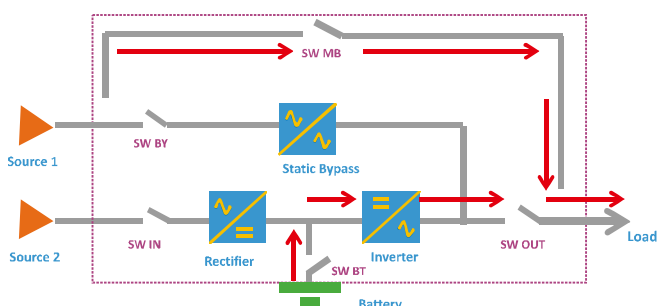
## Main Features

NUMERIC HPE i 33 10-120 kVA is suitable for use in a broad spectrum of applications, thanks to variety of configuration, accessories and options providing flexibility and choice of performance levels:

- Input current distortion < 3%
- Input power factor 0.99
- Power walk-in function to guarantee a progressive rectifier start-up.
- Load Power Factor 0.9 and suitable for powering capacitive loads, such as blade servers, without any reduction in active power (0.9 lead to 0.8 lag).
- Configurable Power Share connections to ensure backup for the most critical loads or programmed to operate only when mains power fails.
- Cold Start facility that starts the UPS even when it is not connected to the mains.

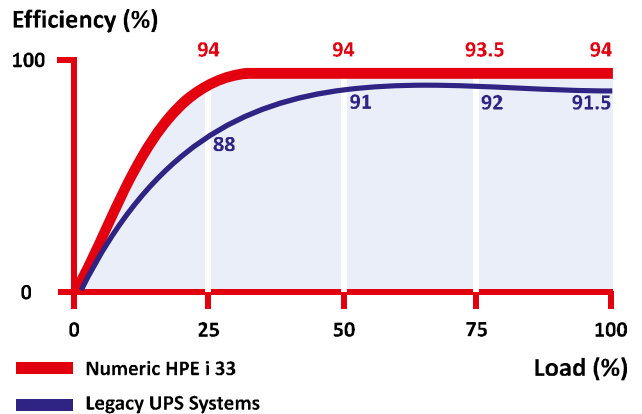
## Operational modes

These systems can be set to operate in four operating modes: ONLINE/ FREQUENCY CONVERTER / ECO and ECO MODES.

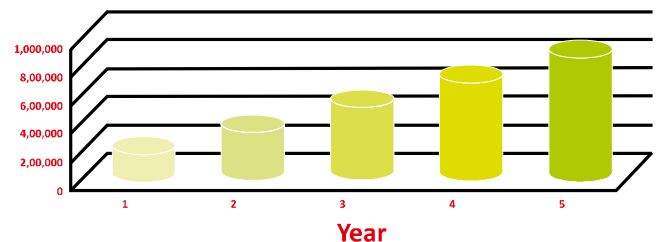


## High Efficiency

High Operating efficiency up to 94% providing energy savings with constant efficiency from 25 to 100% load.



## Savings



Using HPE i 33 10-120 kVA UPS Systems, there is a considerable savings as compared to the legacy UPS systems with a lower efficiency, not including costs saved on lower cooling requirements which is typically shown above over a 5 year period.

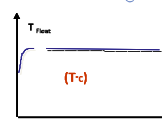
## Battery Care System

The HPE i 33 Battery Care System consists of a number of functions that together Guarantee optimum battery performance such as the Intelligent charge and Limited discharge.

### Algorithm of « intelligent » charge

Automatic adjustment of charging method

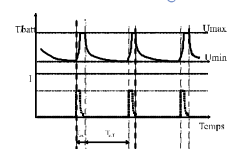
Floating



No regime in permanent floating

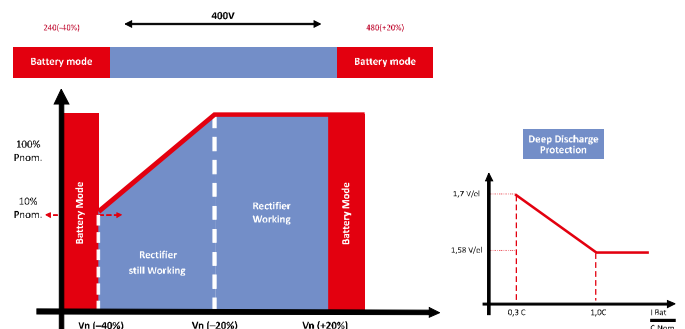
Alternation Floating/ Charge " pulsed"

Pulsed Charge



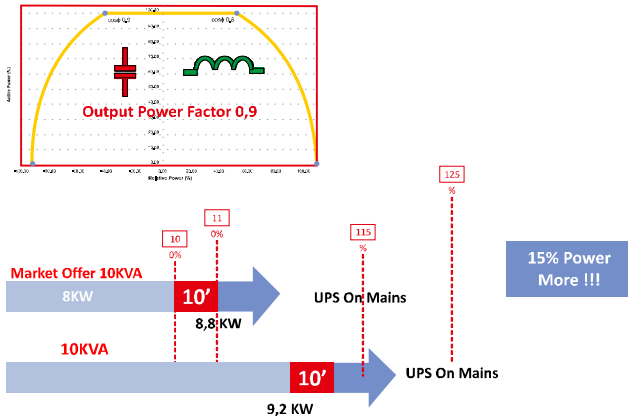
Advantage: Increases the battery life upto 50% and protects the investment on battery

### Limited Discharge

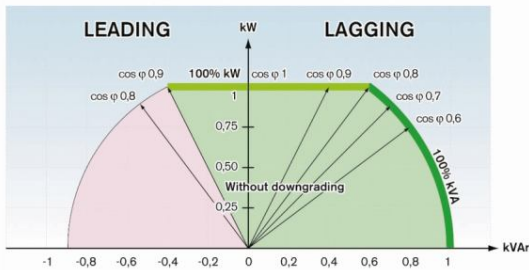


## Power Availability

**HPE  $\alpha$  33 10-120kVA** are offered with output power factor of 0.9 providing up to 15 % more active power (kW) than a traditional UPS and more load expansion.



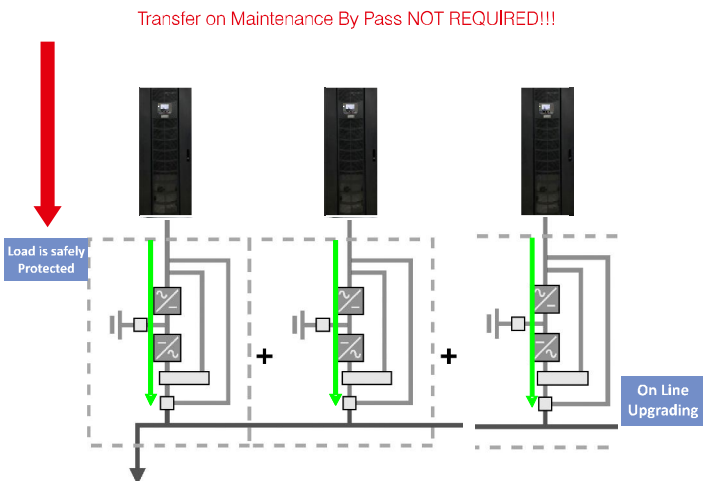
## Designed to Support New IT Loads



The **HPE  $\alpha$  33 10-120kVA** range of UPS systems with Stable output voltage and Active power without de-rating, with loads with a lagging power factor and up to 0.9 leading. A high short-circuit capacity, up to 4 In, which facilitates the selection of protective devices for selectivity in the downstream distribution. Precise voltage even when the load between phases is completely unbalanced.

## Flexibility and Easy to upgrade

Power requirements can change over time. **HPE  $\alpha$  33** Outputs can be multiplied with the " Hot System Expansion" feature, which means that a new UPS can be added to the system while the integrated UPS will configure itself automatically with the system data without any disturbances to the load.



## Communication Options

**HPE  $\alpha$  33** is equipped with a graphic display that provides information, measures, status and alarms regarding the UPS Systems.

Advanced, multi-platform communication for all operating systems and network environments: PowerShield3 monitoring and shut-down software included, for Windows 2008, Vista, 2003, XP; Mac OS X, Linux, Novell and most popular Unix operating systems. Compatible with the Net monitoring system.

2 slots for the installation of optional communication accessories such as network adapters and volt-free contacts.

REPO (Remote Emergency Power Off) with which to power down the UPS through a remote emergency push button.

Input for connection of the auxiliary contact of an external manual bypass.

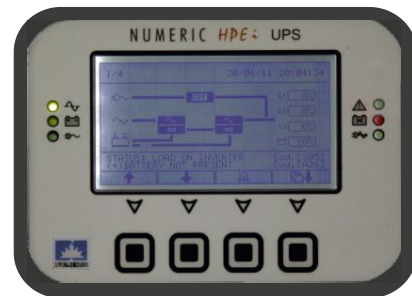
Input for synchronization from an external source.

Graphic mimic panel display for remote connection.

SNMP compatible & RS485, JBUS/MODBUS Communication.

## Man machine interface

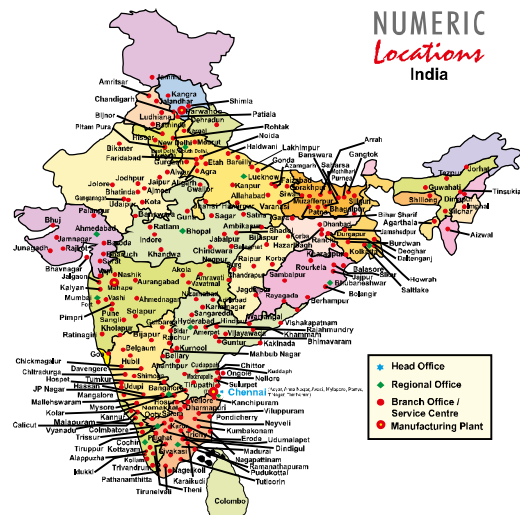
Large Communication Mimic panel and flexible man machine interface.



## Support:

Wide Sales & After Sales Support Network with:

- 13 Regional Offices
- Over 258 Service Centres across India
- Over 900 Field Support Team
- 24 x 7 x 365 Help Desk



## Technical Specifications

<b>Power</b>									
kVA	10	15	20	30	40	60	80	100	120
KW	9	13.5	18	27	36	54	72	90	108
Topology	True On-line Double Conversion (VFI-SS-II)								
<b>Input (AC Supply)</b>									
Rectifier type	IGBT based PF controlled rectifier								
Voltage	380 / 400 / 415 V TP + N (selectable)								
Voltage range	320 - 480V at 100% load								
	240 - 480V at 50% load								
Frequency	50 / 60Hz ± 10%								
Input power factor	> 0.99								
THDi	< 3%								
Power Walk-in	Programmable from 5 - 30 sec								
Bypass Frequency Tolerance	± 5% (adjustable from 0.25 to 10%)								
<b>Output</b>									
Voltage									
Static Regulation	± 1%								
Dynamic Regulation	± 3%								
Frequency	50 / 60 Hz								
Frequency Range	0.25 to 10% adjustable								
THDu	< 1% for 100% linear load								
	< 3% for 100% non - linear load								
Crest Factor	3:1								
Overload @ 0.8 P. F.	115% for Continuous, 125% for 10min								
	150% for 60 seconds								
	168% for 5 seconds								
<b>Overall Efficiency</b>									
On-line Double Conversion Mode	upto 94.0%					upto 93.5%			
Eco Mode	> 98%								
<b>General</b>									
Storage temperature	- 25° up to +55 °C (UPS)								
Ambient temperature	0 to 40°C								
Relative Humidity	95% Max non-condensing)								
Operating Altitude	1000m without de-rating								
Colour	RAL 7016								
Noise Level	48 - 52 dBA at 1 meter							<70dBA at 1 meter	
<b>Paralleling</b>									
Modular	Upto 6 Units								
<b>Standards</b>									
Safety	IEC 62040-1-2								
EMC	IEC 62040-2								
Design	IEC 62040-3								
Enclosure Protection	IP 20 (others on request)								
Marking	CE								
<b>Communication Options</b>									
RS 232 ports for remote contacts									
Slots for Communication Interface for SNMP & BMS integration									
<b>Dimensions</b>									
Width x Depth x Height (in mm)	440 x 850 x 1320					500 x 850 x 1600		750 x 855 x 1900	
Weight ( kgs ) with Transformer Option	175	195	215	260	315				
Weight ( kgs )	90	95	100	130	135	190	200	370	380

Note: As standards, specifications and design change from time to time, please ask for confirmation of the information given in this publication.

NUMERIC HOUSE No.5 , Sir P.S.Sivasamy Salai, Mylapore, Chennai - 600 004, INDIA .  
Tel : +91 -44-2499 3266 Fax : +91 -44-24998210 E-mail : info@numericups.com



A Group brand | **Legrand**

**REGIONAL OFFICE: AHMEDABAD** 079 - 27488779 / 556 **BANGALORE** 080 - 43038000, 01 / 02 / 03 / 04 **BHOPAL** 0755 - 2764201, 2764202  
**CHENNAI** 044 - 24982502, 24982511, 24990466, 24990064, 24993266 **COCHIN** 0484 - 2324616, 2322334 **COIMBATORE** 0422 - 2242290,  
2243716, 2243740 **HYDERABAD** 040-27603048, 27662817 **KOLKATA** 033 -24609233, 24609234, 24609032 **LUCKNOW** 0522 - 2206110,  
2206112 **MADURAI** 0452-2604555, 2602629 **MUMBAI** 022-28373953/54/55 **NEW DELHI** 011-25571347/48/49



No.1 Power Electronics Company  
No.1 On-Line UPS Manufacturer  
No.1 In-Interactive UPS Manufacturer  
Source: SurIndia



Toll Free No. 1 800 425 3266  
www.numericups.com  
NPDM/MKT/BRO/3PH/02

NUMERIC 1/2013

Please Refer our website : [www.numericups.com](http://www.numericups.com) for list of our service centers.