



# PICKING THE RIGHT UPS

## FOR YOUR CRITICAL APPLICATIONS

The backbone of availability is the uninterruptible power supply (UPS) system. With new technologies driving changes in the power systems of critical applications, the importance of availability has in no way diminished. When it comes to having the best power protection for your critical systems, ordinary UPS solutions are not enough.



### ONLINE UPS



Protects against full range of power disturbances in critical applications

#### Deliver better protection than other types of UPS

Seamless transition to backup power sources



Efficiency



Zero Transfer Time



Frequency Regulation and Voltage Regulation



Eliminate's Noise and Transients



Power Outage Protection



Power Factor Correction  
Harmonic Distortion Correction



### LINE INTERACTIVE UPS



Lower-cost yet effective



Supports entire critical load during power disturbances



Brief power interruption during transfers



Voltage Regulation  
**(Limited)**



Eliminates Noise and Transients **(Limited)**



Power Outage Protection



### STANDBY UPS



Simple but limited in terms of design



Lacks power conditioning



Brief power interruption during transfers



Applicable for workstation-level loads



Eliminates Noise and Transients **(Limited)**



Power Outage Protection

## DAMAGING POWER INTERFERENCES

Know the different power disturbances and how it can affect your critical systems.



### OUTAGES

A total power loss



### TRANSIENT

A narrow, fast-rise voltage variation. Followed by a damped oscillation decaying to nominal in less than one cycle



### SAGS

Short duration A (temporary) drop in voltage level



### FREQUENCY DEVIATION

Change in frequency exceeded its preset limits



### SURGES

Short duration A (temporary) drop in voltage level



### UNDER - VOLTAGE

Reduced line voltage for periods of time



### SPIKES

A sudden increase of voltage, can be up to 110% of nominal



### OVER - VOLTAGE

Rise line voltage for periods of time



### NOISE

Low-level signals, superimposed on the power sine wave, Impulses and EMI/RFI noise superimposed on the power conductors



### HARMONICS

Quick voltage variations, harmonics occur at the natural multiple of the standard power wave

## VERTIV OFFERS RELIABLE & EFFICIENT UPS SOLUTIONS THAT WORK TOGETHER TO SAFEGUARD YOUR CRITICAL APPLICATIONS



### Liebert® GXT MT+ CX (1kVA, 2kVA, 3kVA)

#### Features and Benefits

- True Online Double Conversion with DSP Control Technology
- 0.9 Power factor for Standard models, 0.8 for Long Backup
- Standard and Long Backup models
- Very high (0.99) power factor at input
- Can handle extremely low and high input voltage
- Can handle extreme fluctuations of generator frequency

#### APPLICATIONS



Small data centers



Process automation equipment (ATM Machines)



VOIP



### Liebert® GXT4 (700VA to 3kVA; 5kVA to 10kVA)

#### Features and Benefits

- Active Eco-Mode
- Energy Star Certified
- Up to 6 external battery packs
- Built-in Maintenance Bypass (5 -10kVA)
- High power factor in all models
  - 0.8pf for 5-6kVA
  - 0.9pf for all other models

#### APPLICATIONS



Data Center



Government



Workstations



Telecom



Marine



Healthcare



Retail



BFSi



### Liebert® ITA2 (5kVA – 20kVA)

#### Features and Benefits

- Unity power factor
- Eco-Mode provides a superlative efficiency of up to 99%
- Dust and moisture resistant
- Suitable for long back-up up to hours
- Parallelable up to 4 units
- Compliance with seismic conduction & vehicle carrying test
- Built-in web monitoring

#### APPLICATIONS



Edge of Networks



Data Center



Automation Industries



Workstations



Telecom



Marine