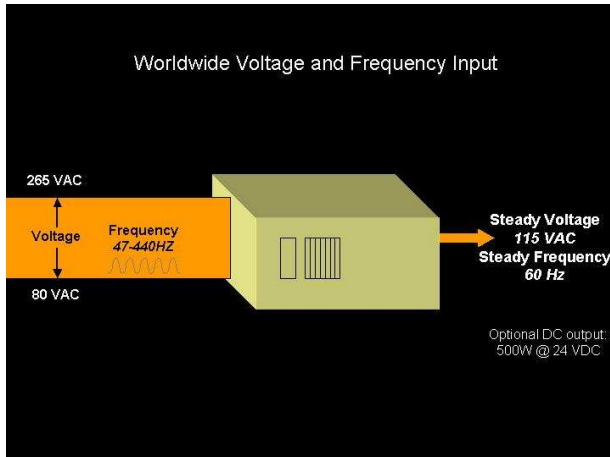


Wide Input Voltage and Frequency Window Allows Worldwide Mobility (85-265 VAC, 47-440 Hz)

The voltage and frequency of power from generators and grids vary widely around the world. You could carry a box full of adapters to meet them all. Or you could use a conditioner that is compatible with any power source in the world – including DC. Acumentrics' UPS products *automatically* register the input voltage and frequency and *automatically* condition it into ready, steady, useful power. We offer complete generator compatibility, no matter where you are in the world.



Minimized Deep-Discharge Extends Battery Life

Slight voltage and frequency fluctuations force most Uninterruptible Power Supply systems to operate using battery power. Frequent deep cycle battery discharges shorten the life of the batteries and jeopardize the functional integrity of the UPS by leaving the batteries in a partially charge state. Our wide input voltage and frequency window ensures output remains continuous and regulated, regardless of input fluctuations. Acumentrics' UPS operates on battery power only during extreme brownouts and blackouts. So when you need battery backup to your critical load, it will be there.

Electronic Power Factor Correction Reduces Reflected Harmonics

Most UPS systems reflect harmonics, which may cause overheating in electrical wiring and upstream transformers, and also injure sensitive electronic equipment. Acumentrics' UPS products work as harmonic filters by incorporating electronic *power factor correction* that boosts the DC bus to correct the UPS input power factor to near unity (.99) --reducing the reflected harmonics to below 1% total harmonic distortion (THD)!

This correction also makes it easy to retrofit Acumentrics' UPS onto applications without having to change costly input breakers, change wiring, or replace generators. The input requirements are automatically matched to the output capacity.

Rugged Flow-Through Design Supports Toughest Field Applications

Most “ruggedized” UPS products have been upgraded from a non-rugged design. This approach unintentionally carries non-rugged features into the box. But at Acumentrics we aimed for a highly rugged supply from the beginning. Our power boards are rigidly connected to a “flow through” heat sink that forms a cooling tunnel through the UPS. Our specialized board mounting limits the stresses that can be caused on elongated rectangular board designs during extreme G forces. Our gasket-sealed, aluminum chassis tolerates MIL-STD shock and vibration. Our components are carefully specified to work in heat and

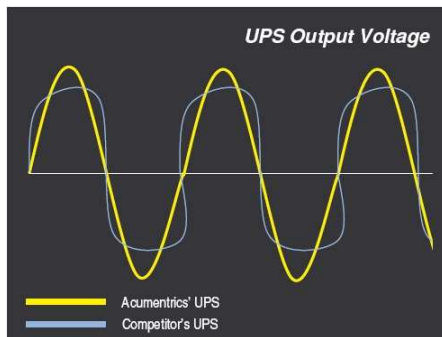
cold. With Acumentrics, you get an UPS that withstands extreme G forces, withstands extreme temperatures, and never comes in contact with dust, moisture, or debris from the outside.

Intelligent Charger Prolongs Battery Life

Primitive rapid on/off chargers in some UPS tend to cause battery overcharging and oxidation of the plates, which shortens the life of the battery. Acumentrics' intelligent charger monitors the batteries' rising voltage and decreases the charge current proportionally as it nears full charge. Our elegant charging prolongs battery life to a 5 to 8-year expectancy. In addition, the ACG2500 series can have parallel battery strings for extended duration.

High Crest Factor Tolerance Produces A Cleaner Sine Wave

Most computers today have switch-mode power supplies that draw a non-linear current waveform. They demand a high amount of current for a few milliseconds during the positive and negative portion of the cycle. This Peak-to-RMS current ratio is termed the Crest Factor. The inverter section of a UPS must be able to handle this high crest factor or the output voltage will result in fault-topping, creating a square wave. Acumentrics' UPS are designed for these high crest factor, non-linear loads. They produce a clean sine wave, which enables the UPS to be fully loaded, so you do not need to oversize the UPS. For instance a 2kVA Acumentrics UPS may support the same non-linear load as other manufacturers' 4kVA UPS.



High Overload Capabilities Reduces Vulnerability

Computer loads tend to fluctuate throughout the day, which can bring high momentary current demands. UPS systems without high overload capability continually transfer to bypass. This leaves your application vulnerable to brownout and blackouts while in bypass mode. Also, some manufacturers' UPS products tend to generate switching spikes during transfer, which may degrade and damage the electronics in the application. Acumentrics uses high-power components to provide better overload capacity, without paralleling many small transistors and reducing inverter reliability.

Clean Sine Wave (1% THD Typical) Supports Sensitive Electronics

Electrical noise and distorted voltage waveforms many cause sub-optimal computer performance. Acumentrics' UPS technology boosts the DC bus to produce the cleanest sine wave output. A clean sine wave is a good measure of the quality and reliability of the UPS. This is especially important in highly sensitive electronic equipment such as radar.

Total Isolation for Premier Conditioning

Electrical noise may cause parity errors, system lockups, and irreparable damage to sensitive electronic equipment. This noise usually travels on the neutral-to-ground circuit path. In most environments, an isolation transformer is the most effective tool to eliminate this noise. Acumentrics provides a low impedance isolation transformer in every Rugged Series UPS. Therefore, the Acumentrics UPS becomes a "separately derived power source," as defined by the National Electric Code because the neutral is bonded

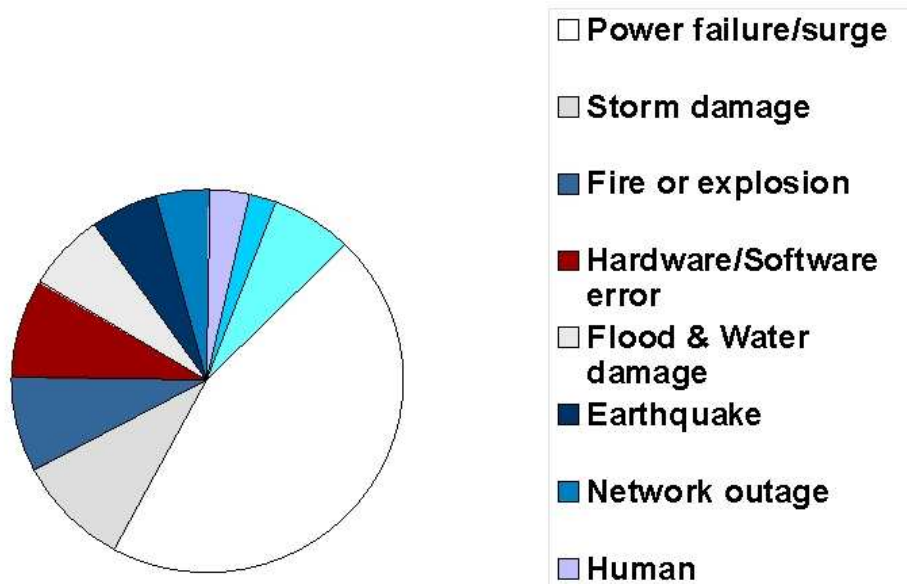
Acumentrics Rugged-UPS™ Design Details

to ground on the transformer output. This makes a Zero Volt reference ground for best-practice computer and electronic equipment operation. It is the ultimate in power conditioning.

Hot-Swappable Battery Packs for Field Agility

In the field, you need speed and agility. Acumentrics UPS products employ zero-maintenance, valve regulated, lead acid batteries that are enclosed in a user-replaceable battery pack. These are designed for rapid, hot-swap field replacement even under load conditions.

POWER FAILURE IS THE #1 CAUSE OF DATA LOSS:



RELIABILITY ISN'T EXPENSIVE. IT'S PRICELESS.