

Make Your Data Center COOLER and GREENER

A data center consumes up to 50 times more energy per square foot than a typical office building (source: U.S. Department of Energy). IT devices such as servers and switches actually consume only part of the electricity used by a data center; the rest is required for lighting, cooling and power distribution, including UPS systems. All UPS systems are less than 100% efficient, because a percentage of the electricity drawn by the UPS is wasted as radiated heat. Waste heat requires cooling systems to work harder, using even more power—

another watt for each two watts lost by the UPS (sources: IBM and Intel).

Today's advanced UPS systems have excellent overall efficiency, and on-line models typically offer an "economy mode" setting that delivers even better efficiency. You can achieve significant energy savings by using high-efficiency UPS systems and hitting the efficiency "sweet spot" by right-sizing UPS system load levels to balance fault-tolerance and economy. ENERGY STAR® qualified systems—certified to meet strict efficiency standards defined by the U.S. Environmental Protection Agency—also help savings add up.







How TRIPP LITE Protects the ENVIRONMENT



UPS batteries fall outside the scope of RoHS, but the success of extensive recycling efforts ensure they stay out of landfills. Lead-acid batteries are recycled at a higher rate—greater than 99%—than any other consumer product (source: Battery Council International). Tripp Lite also uses recyclable, CFC-free packaging designed to minimize waste and offers easy battery replacement options to extend the useful life of UPS systems. We believe environmental responsibility ultimately leads to better products and happier customers.

Make Your Data Center COOLER and GREENER continued

Tripp SmartOnline® Systems are up to 99% efficient in economy mode, increasing efficiency 10% or more versus traditional online double-conversion UPS systems. Manage and right-size load levels to achieve even greater efficiency gains. Tripp Lite offers several tools to make that job easier. Metered PDUs include digital load meters, allowing you to monitor load levels on-site in real time. Switched and monitored PDUs add a network interface that allows you to monitor load levels remotely via SNMP, Web or telnet. Add the same capability to Tripp Lite's network/server UPS systems with the optional WEBCARDLX. Tripp Lite's free PowerAlert® software also enables remote monitoring. With these tools, you can adjust load levels and optimize the efficiency of any UPS.

Increasing UPS efficiency by 10% cuts your data center's carbon footprint substantially. For a modest 32kW load, you can reduce CO₂ emissions by almost 42 tons per year. Over five years, that conserves more than 250 megawatt-hours of electricity—enough to power an average single-family home for more than 20 years—saving you \$30,564 on your electric bill!

Benefits of Increasing Data Center UPS Efficiency by 10% (32kW Load)



* Based on U.S. average CO₂ emissions of 1.64 lbs. per kilowatt hour generated (EPA data).



** Based on U.S. average cost of 12 cents per kilowatt hour.



Close-Coupled COOLING Freezes Out Inefficient A/C

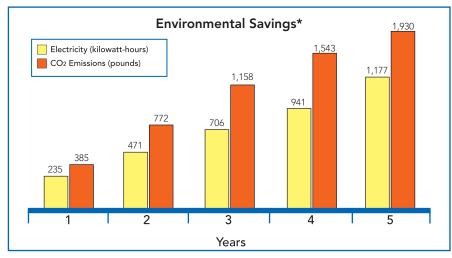
Tripp Lite's close-coupled cooling solutions provide targeted temperature control, lower operating costs and flexibility to spot-cool or reconfigure as needed.

- ROW-BASED in-row cooling units for high capacity
- PORTABLE compact solutions ideal for cooling small rooms, rack enclosures or hot spots
- RACK-MOUNT a flexible, easy-to-implement solution that mounts directly inside a rack enclosure
- WALL-MOUNT specialized cooling units designed for wall-mount rack cabinets

Eco-Friendly Home and Office UPS Systems PAY YOU BACK

Everyone can benefit from greener UPS technology. Even if you have only a single UPS protecting a desktop PC, a high-efficiency UPS system will reduce your environmental impact and save you money. Tripp Lite has developed highly efficient UPS systems for smaller applications—up to 99% efficient. Compared with a legacy UPS system running at 94% efficiency, a highly efficient Tripp Lite desktop UPS supporting a 500-watt load can reduce your carbon emissions footprint by nearly 2,000 pounds and save you \$125 in five years—enough to pay for the UPS system! For even greater savings, Tripp Lite's intelligent outlet technology cuts power to peripheral devices after you power down your PC. This eliminates wasteful "phantom loads" that consume electricity even when a device appears to be turned off.

Benefits of Increasing Small Office UPS Efficiency by 5% (500W Load)



* Based on U.S. average CO₂ emissions of 1.64 lbs. per kilowatt hour generated (EPA data).



^{**} Based on U.S. average cost of 12 cents per kilowatt hour.



ENERGY-SAVING Surge Protectors

For electronics that don't need battery backup, an energy-saving surge protector saves electricity by disabling AC power to idle equipment. Be green and save money while saving your equipment from harmful power spikes and line noise.

- The "Always On" outlets provide continuous power while energy-saving outlets switch off when connected equipment is idle
- The energy-saving outlets are recommended for intermittent-use devices such as TVs, receivers, printers, scanners, DVD players, game consoles, amplifiers and speaker systems
- All Tripp Lite energy-saving surge protectors include a lifetime warranty and connected equipment insurance for peace of mind

CONSERVATION Begins at Home

Tripp Lite's commitment to the environment shows in every product we make, but we also do our part in our own backyard. Tripp Lite's Chicago headquarters is located in an energy-efficient multiple-use building that combines a state-of-the-art warehouse facility with corporate offices. Tripp Lite employees spearhead on-site recycling efforts and benefit from eco-friendly programs such as mass-transit vouchers and company-sponsored shuttle service to public transportation.

About TRIPP LITE

Since 1922, Tripp Lite has established a global reputation for quality by providing reliable, cost-effective products and responsive service. Loyal customers worldwide choose Tripp Lite to power, protect and connect equipment ranging from home electronics to servers in enterprise data centers.

Tripp Lite manufactures more than 4,000 products, including UPS systems, power management tools, PDUs, racks, cooling solutions, KVM switches, console servers, cables, connectivity solutions, charging stations and carts, display mounts, surge protectors, power strips, network switches, power inverters, standing desks, custom products and specialty products for healthcare, government, education and digital signage applications.



To learn more about Tripp Lite, visit www.tripplite.com.

Get Expert Help Increasing Your Efficiency

Tripp Lite's FREE infrastructure assessment can help you identify opportunities to make your data center, server room or network closet more energy-efficient. For more information or to schedule your free assessment, simply contact us:

on hypothetical scenarios; actual results will vary. Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice.



773.869.1236 | solutions@tripplite.com



1111 W. 35th Street Chicago IL 60609 www.tripplite.com

