

FROM DESKTOP TO DATA CENTER

# Protect the Planet and Save Money

By increasing UPS efficiency 10% for a 32kW load, you can save 250 megawatt-hours of electricity over a five-year period – and you can reduce your electric bill \$30,000!



## 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.



SU1500RTLCD2U



SU2000LCD1U



SU3000LCD2UHV

## How We Protect the **ENVIRONMENT**

Our products comply with the European Union's RoHS (Restriction of Hazardous Substances) directive, which means they adhere to strict standards in the reduction of six hazardous substances: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ether (PBDE). We are industry leaders in RoHS compliance, and continuing this trend is essential to our design and manufacturing philosophies.

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). We also use recyclable, CFC-free packaging designed to minimize waste and offer easy battery replacement options to extend the useful life of UPS systems. We believe environmental responsibility ultimately leads to better products and happier customers.

For battery recycling information, visit [tripplite.com/support/recycling-program](http://tripplite.com/support/recycling-program)

**TRIPP-LITE**  
by  **Eaton**

## Make Your Data Center COOLER and GREENER *continued*

Our SmartOnline® UPS Systems are up to 99% efficient in economy mode, increasing efficiency 10% or more versus traditional on-line double-conversion UPS systems. Manage and right-size load levels to achieve even greater efficiency gains. We offer 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 our network/server UPS systems with the optional WEBCARDLX network card. Our 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 CO<sub>2</sub> 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!



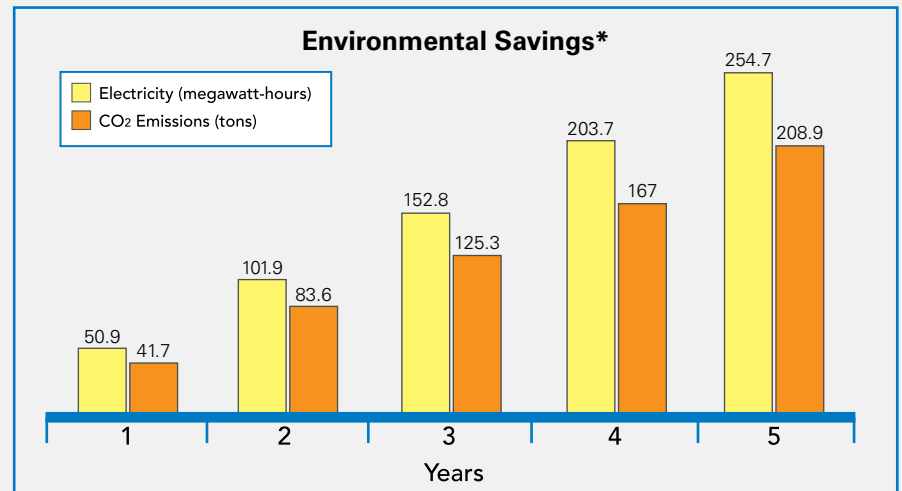
SRCOOL12K

### Close-Coupled COOLING Freezes Out Inefficient A/C

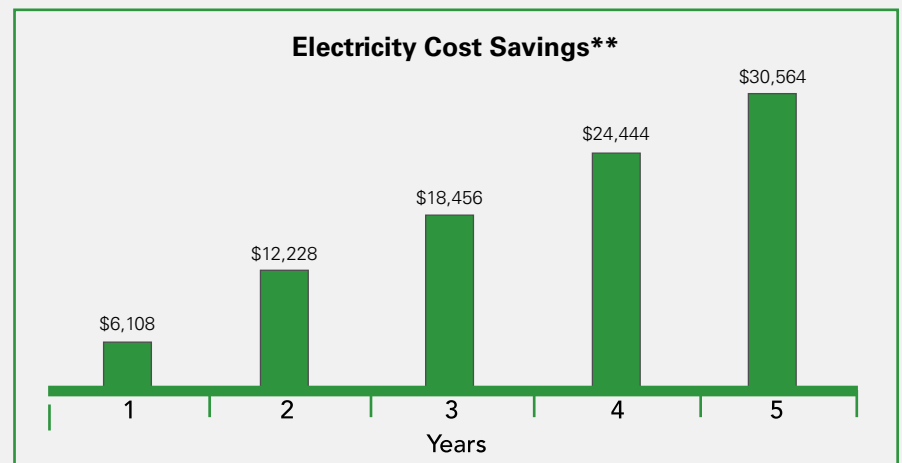
Our close-coupled cooling solutions provide targeted temperature control, lower operating costs and flexibility to spot-cool or reconfigure as needed.

- **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 unit designed for wall-mount rack cabinets

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



\* Based on U.S. average CO<sub>2</sub> emissions of 1.64 lbs. per kilowatt hour generated (EPA data).



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

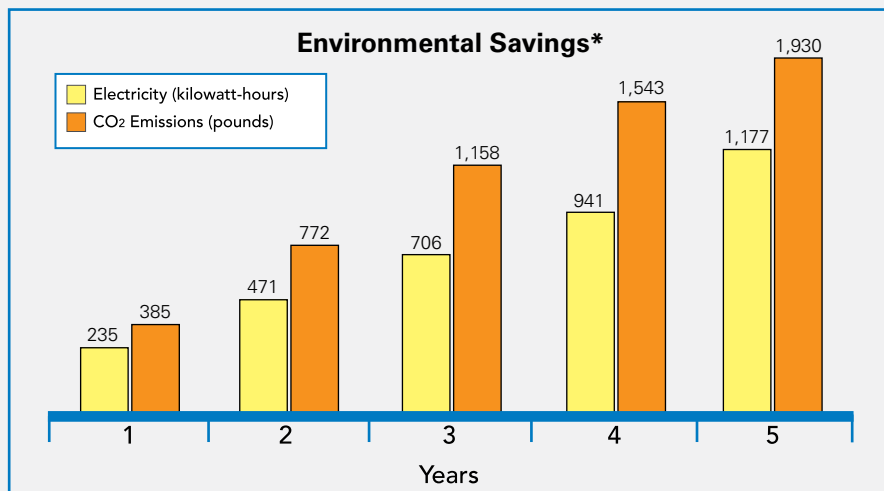
## Eco-Friendly Home and Office UPS Systems **PAY YOU BACK**

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. We have developed highly efficient UPS systems for smaller applications that are up to 99% efficient. Compared with a legacy UPS system running at 94% efficiency, a highly efficient 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, our 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.

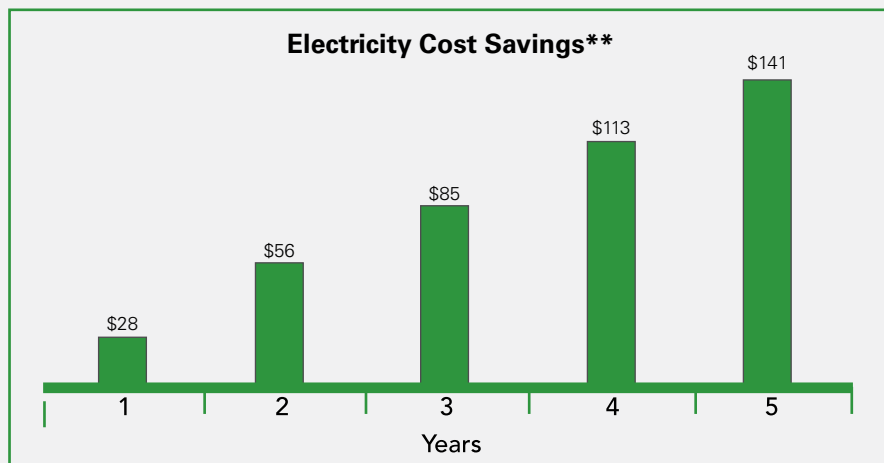


SMART1500PSGLCD

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



\* Based on U.S. average CO<sub>2</sub> emissions of 1.64 lbs. per kilowatt hour generated (EPA data).



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

### Gaming UPS Systems Can **SAVE ENERGY**

Our UPS systems designed for gaming PCs and consoles have energy-saving outlets.

- The master outlet reports wattage drawn by the PC or other connected device. In ECO mode, the master outlet also controls the energy-saving outlets.
- Energy-saving outlets turn off if the PC or device connected to the master outlet shuts down or enters standby.

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## 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 protecting your equipment from harmful power spikes and line noise.

- The "always on" outlets provide continuous power.
- Select models have energy-saving outlets that switch off when the device connected to the master outlet is idle or shut off.
- The energy-saving outlets are recommended for intermittent-use devices such as TVs, receivers, printers, scanners, DVD players, game consoles, amplifiers and speaker systems.
- Select models have individually switched outlets. A main switch offers one-touch control of the individually switched outlets.
- All our energy-saving surge protectors include a lifetime warranty and connected equipment insurance for peace of mind.

To learn more about energy-saving power solutions, visit [tripplite.com](http://tripplite.com).

## About **TRIPP LITE BY EATON**

Eaton's Tripp Lite business provides industry-leading digital infrastructure solutions for consumers and IT customers worldwide, including cables and connectivity, charging solutions, mounts, carts, server racks, cooling, KVMs, UPS systems, PDUs and surge protectors. Learn more at [tripplite.com](http://tripplite.com).

Eaton's electrical business is a global leader with deep regional application expertise in power distribution and circuit protection; power quality, backup power and energy storage; control and automation; life safety and security; structural solutions; and harsh and hazardous environment solutions. Through end-to-end services, channel and an integrated digital platform and insights, Eaton is powering what matters across industries and around the world, helping customers solve their most critical electrical power management challenges.

## Get Expert Help Increasing Your Efficiency

Our FREE infrastructure assessment can help you identify opportunities to make your data center, server room or network closet more energy-efficient.

**TRIPP·LITE**  
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For more information or to schedule your  
free assessment, simply contact us:

**Solutions Team**  
773.869.1236 | [solutions@tripplite.com](mailto:solutions@tripplite.com)



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