GREEN SOLUTIONS











Tripp Lite Green Power Solutions

- Save Energy Save Money
- Protect the Planet

Green power solutions reduce operating costs, energy use and environmental impact while protecting your equipment from damaging power problems and downtime.











CONTENTS **Desktop Solutions ECO-UPS™** Systems 2-3 4-5 **ECO-Surge™ Suppressors Data Center Solutions** SmartOnline™ UPS Systems 6-8

• Protect the Planet • Save Energy • Save Money • Protect the Planet • Save Energy

TRIPP·LITE DESKTOP SOLUTIONS

ECO-UPS Energy-Saving UPS Systems

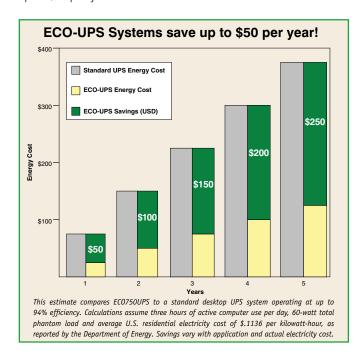




- 350 to 850 VA
- Green Outlet[™] Technology
- Up to 99% Efficiency
- Protection from Blackouts, Phantom Loads, Surges & Line Noise
- Tel/Modem Line Protection
- LCD Status Screen (Select Models)

SAVE ENERGY & LOWER UTILITY BILLS

ECO-UPS Systems use less electricity than standard UPS systems. With innovative Green Outlet technology and up to 99% efficiency, ECO-UPS Systems can reduce your electric bill by up to \$50 per year.



ELIMINATE PHANTOM LOADS

Every AC adapter and glowing LED represents a potential "phantom load"—electricity wasted by an idle device, even when it appears to be turned off. Green Outlet technology eliminates phantom loads by automatically cutting power to designated energy-saving outlets when your computer shuts

down or enters standby. Other outlets stay on to support devices that operate continuously, such as wireless routers and broadband modems.

PROTECT COMPUTERS & ELECTRONICS

Designed for home and office applications, ECO-UPS Systems protect your computer, electronics and other equipment from downtime, damage and data loss caused by power problems, including blackouts, surges and line noise. Reliable battery backup power keeps computers operating through shorter outages and allows enough time to save files and shut down during longer ones. Free PowerAlert software* saves files automatically on unattended computers, and ECO-UPS Systems also work with built-in power management features of popular desktop operating systems. Surge-blocking phone jacks protect telephones, fax machines, analog modems, DSL modems and other communications equipment. Select models include an illuminated LCD status screen that displays voltage, wattage, runtime and other useful information.

*Download at www.tripplite.com/poweralert

PROTECT THE ENVIRONMENT

Over a five-year period, a single ECO-UPS System can shrink your carbon footprint 3,152 pounds and conserve 2,352 kilowatt-hours of electricity. That's enough energy to power a compact fluorescent



light bulb for 20 years! ECO-UPS Systems are also RoHS compliant and use recyclable, CFC-free packaging designed to reduce waste. Successful recycling initiatives allow most components to reenter the supply chain instead of landfills.

HOW GREEN OUTLET TECHNOLOGY WORKS-

The ECO-UPS System connects to your computer's USB port. When your computer shuts down or enters standby, the UPS waits three minutes to make sure your computer is not rebooting or temporarily unable to communicate, then Green Outlet technology automatically cuts power to the designated energysaving outlets.

Cutting power to the energy-saving outlets prevents idle devices from wasting electricity. The battery-backup outlets and surgeonly outlets remain powered, supporting always-on devices like routers and broadband modems. When your computer starts up again, Green Outlet technology automatically restores power to the energy-saving outlets and your entire system is ready to use.

LEDs or LCD icons indicate whether Green Outlet technology is active and whether the energy-saving outlets are on or off.



Green Outlet technology cuts power to designated energy-saving outlets when your computer shuts down or enters standby mode, preventing idle devices connected to those outlets from wasting energy. Other outlets stay on to support devices that operate continuously, such as routers and broadband modems.



A ENERGY-SAVING OUTLETS

Green Outlet technology eliminates phantom loads by automatically cutting power to the energy-saving outlets when your computer shuts down or enters standby mode.* The outlets also provide surge and noise protection.

*USB connection required via included cable.

B BATTERY-BACKUP OUTLETS

Protect equipment from blackouts, surges and line noise. Remain on while AC power or battery backup power is available.

SURGE-ONLY OUTLETS

Protect equipment from surges and line noise. Remain on while AC power is available.

ILLUMINATED LCD STATUS SCREEN

Displays voltage, wattage, runtime, operating mode and other useful information. (Included with ECO850LCD and ECO650LCD. Other models include status LEDs instead.)

TEL/MODEM SURGE PROTECTION

SPECIFICATIONS







Model	Load Capacity	LCD Status Screen	Runtime (Single PC) (1)	Outlets (5-15R)	Input Cord Length	HID-Compliant USB (2)	Data Line Surge Protection	Connected Equipment Insurance (3)	Housing Type	
ECO-UPS Energy-Saving UPS Systems										
EC0350UPS	350 VA (180 W)	No	12 min.	6 (3 Battery-Backup, 2 Energy-Saving, 1 Surge-Only)	6 ft.	Yes	Tel/Modem	\$100,000	Compact/ Low-Profile	
EC0550UPS	550 VA (300 W)	No	17 min.	8 (4 Battery-Backup, 3 Energy-Saving, 1 Surge-Only)	6 ft.	Yes	Tel/Modem	\$100,000	Compact/ Low-Profile	
EC0750UPS	750 VA (450 W)	No	45 min.	12 (6 Battery-Backup, 4 Energy-Saving, 2 Surge-Only)	6 ft.	Yes	Tel/Modem	\$100,000	Compact/ Low-Profile	
ECO-UPS Energy-Saving UPS Systems with LCD										
ECO650LCD	650 VA (325 W)	Yes	17 min.	8 (4 Battery-Backup, 3 Energy-Saving, 1 Surge-Only)	6 ft.	Yes	Tel/Modem	\$100,000	Compact/ Low-Profile	
EC0850LCD	850 VA (425 W)	Yes	45 min.	12 (6 Battery-Backup, 4 Energy-Saving, 2 Surge-Only)	6 ft.	Yes	Tel/Modem	\$100,000	Compact/ Low-Profile	

TRIPP·LITE DESKTOP SOLUTIONS

ECO-Surge Energy-Saving Surge Suppressors











• Up to 3,600 Joules

 Protection from Surges, Line Noise & Phantom Loads







TLP808NETG





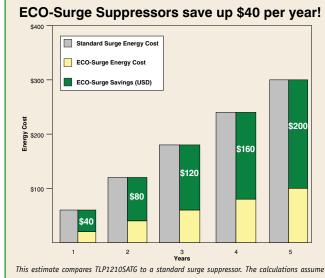




TLP76MSG

SAVE ENERGY & LOWER UTILITY BILLS

Green Outlet technology allows ECO-Surge Suppressors to reduce your electric bill by up to \$40 per year.



the Master device is turned on for three hours per day, 50-watt total phantom load and average U.S. residential electricity cost of \$.1136 per kilowatt-hour, as reported by the Department of Energy. Savings vary with application and actual electricity cost

ELIMINATE PHANTOM LOADS

Every AC adapter and glowing LED represents a potential "phantom load"—electricity wasted by an idle device, even when it appears to be turned off. Green Outlet technology eliminates phantom loads by cutting power to energy-saving outlets when connected devices are idle. Other outlets stay on to support devices that operate continuously, such as routers.

PROTECT COMPUTERS & AUDIO/VIDEO EQUIPMENT

Designed for home and office applications, ECO-Surge Suppressors protect your computers and electronics from damage and interference caused by power problems, including surges and line noise. Models TLP1210SATG and TLP808NETG include surge-blocking RJ45 jacks to protect equipment connected to phone or Ethernet lines, including telephones, fax machines, modems, network cards and routers. Model TLP1210SATG also includes surge-blocking coaxial "F" connectors to protect HDTVs, cable boxes, satellite systems, TV tuners and other audio/video equipment.

PROTECT THE ENVIRONMENT

Over a five-year period, a single ECO-Surge Suppressor can shrink your carbon footprint 2,568 pounds and conserve 1,916 kilowatt-hours of electricity. That's enough energy to power a compact fluorescent light bulb for 16 years!

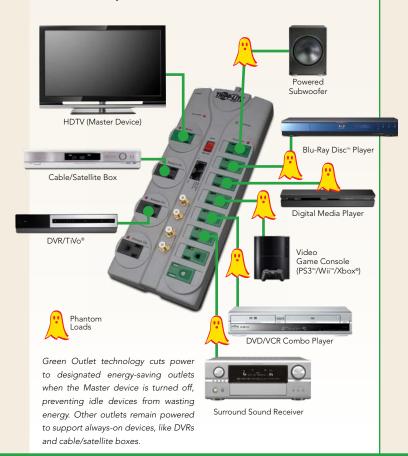


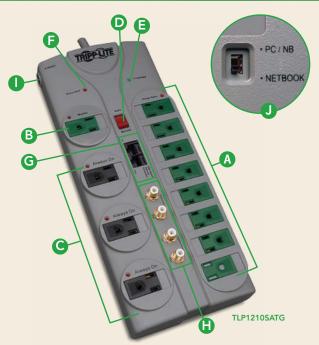
ECO-Surge Suppressors are also RoHS compliant and use recyclable, CFC-free packaging designed to reduce waste.

SAVE ENERGY FOUR DIFFERENT WAYS

You can choose the Green Outlet technology that works best for you, or mix and match for different applications.

- Models TLP1210SATG and TLP808NETG automatically switch energy-saving outlets off or on when you switch the device connected to the "Master" outlet off or on. The wattage switch adjusts sensitivity for low- or high-wattage devices.
- Models TLP78TUSBG and TLP74TG allow you to set up to 20 hour/minute/day timer settings to automatically switch energy-saving outlets off or on in two separate banks.
- Model TLP76MSG allows you to turn each energy-saving outlet off or on individually with its own illuminated power switch.
- Model TLP66RCG allows you to switch energy-saving outlets off or on through walls, doors and furniture with a convenient key chain remote control.





A Energy-Saving Outlets

Green Outlet technology eliminates phantom loads by automatically cutting power to the energy-saving outlets when the Master device is turned off.

B Master Outlet

Detects whether the Master device is on or off.

© Always-On Outlets

Remain powered whether the Master device is on or off.

Auto/Manual Switch

Switches between energy-saving mode (Auto) and standard mode (Manual).

Protected LED

Indicates whether surge protection is functioning.

Grounded LED

Indicates whether the wall outlet is grounded.

- **G** RJ45 Tel/Network Protection
- (H) Coaxial Protection
- Circuit Breaker
- Wattage Switch (bottom)



SPECIFICATIONS

	Surge Protection	Energy-Saving		Input Cord	Connected Equipment	C VI JUS		
Model	Rating (1)	Outlet Controller	Outlets (5-15R)	Length	Insurance (2)	Other Features		
ECO-Surge Energy-Saving Surge Suppressors								
TLP66RCG	2,100 Joules	RF Remote Control	6 (4 Remote-Controlled, 2 Always-On)	6 ft.	\$100,000	Key Chain Remote		
TLP76MSG	1,080 Joules	Individual Switches	7 (6 Individually Switched, 1 Always-On)	6 ft.	\$25,000	Illuminated Switches, Master On/Off Switch		
TLP74TG	1,400 Joules	Dual Timers	7 Timer-Controlled (4 in Bank One, 3 in Bank Two)	4 ft.	\$75,000	_		
TLP78TUSBG	2,100 Joules	Dual Timers	7 Timer-Controlled (4 in Bank One, 3 in Bank Two)	8 ft.	\$150,000	2 USB Charging Ports		
TLP808NETG	2,160 Joules	Master Outlet	8 (5 Energy-Saving, 2 Always-On, 1 Master)	8 ft.	\$150,000	Tel/Network Protection		
TLP1210SATG	3,600 Joules	Master Outlet	12 (8 Energy-Saving, 3 Always-On, 1 Master)	10 ft.	\$250,000	Tel/Network + Coaxial (2 Lines) Protection		

TRIPP·LITE DATA CENTER SOLUTIONS

SmartOnline[™] Intelligent True On-Line UPS Systems





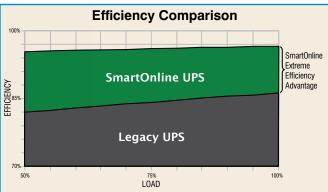
SmartOnline Modular 3-Phase UPS

SAVE ENERGY & REDUCE OPERATING COSTS

Replacing traditional on-line UPS systems with high-efficiency SmartOnline UPS Systems will make your data center cooler, greener and more cost-effective. All UPS systems are less than 100% efficient because part of the electricity drawn by the UPS is lost as radiated heat before it reaches your equipment. The heat also requires cooling systems to work harder, consuming an additional ½ watt of cooling for each watt lost by the UPS.*

Tripp Lite's SmartOnline UPS Systems have good overall efficiency and offer an Economy Mode setting that delivers even better efficiency. SmartOnline UPS Systems are up to 97% efficient in Economy Mode, a potential increase of 10% or more versus traditional on-line UPS systems. Replacing 160kVA of traditional UPS capacity with SmartOnline UPS Systems can save more than \$20,000 per year. You'll also reduce your facility's CO₂ emissions by 136 tons (enough to offset more than 2,000 flights from New York to Washington) and conserve more than 200 megawatt-hours of electricity (enough to power 18 typical U.S. homes).**

 $^{\circ}$ Reported by Gartner, IBM, Intel and other sources. $^{\circ}$ Based on U.S. average residential electricity consumption of 936kWh per month, as reported by the Department of Energy.



Higher efficiency means lower utility bills. SmartOnline UPS Systems can save over \$20,000 per year for each 160 kVA load they support.

This estimate compares a SmartOnline UPS System operating at 97% efficiency in Economy Mode to a traditional on-line UPS system operating at 87% efficiency. The calculations assume a 24x7 duty cycle and U.S. average commercial electricity cost of \$.1028 per kilowatt-hour, as reported by the Department of Energy. Savings vary with application and actual electricity cost.

OPTIMIZE EFFICIENCY

UPS efficiency is typically best at full load and decreases as the load decreases. Operating at less than 100% load is recommended to avoid overloads caused by fluctuating power requirements, but the load is often far below recommended levels simply



because it hasn't been optimized. Tripp Lite offers several tools to help you safely right-size load levels and balance fault tolerance and efficiency. Metered, Monitored and Switched PDUs include load meters that allow you to monitor load levels on-site. Monitored and Switched PDUs also include a network interface that allows you to monitor load levels remotely. The optional SNMPWEBCARD accessory adds the same capability to any SmartOnline UPS System.

PROTECT CRITICAL SYSTEMS

SmartOnline UPS Systems provide ideal protection for servers, storage, network equipment and telecom equipment in data center, colocation, virtualization, VoIP, cloud computing, computer room, network closet, generator backup and other applications. True on-line, double-conversion operation delivers precision-regulated, pure sine wave output power, isolating equipment from damaging power problems, including blackouts, brownouts, overvoltages, surges, line noise, harmonic distortion, electrical impulses and frequency variations. Optional external battery packs provide unlimited runtime scalability to meet any battery backup requirement. SmartOnline Hot-Swappable and Modular 3-Phase UPS Systems also include hot-swappable power module technology and advanced bypass features that eliminate critical system downtime and ensure business process continuity, even during UPS maintenance, repair or replacement.

PROTECT THE PLANET

Tripp Lite was an early supporter of the RoHS (Restriction of Hazardous Substances) directive and leads the industry in RoHS compliance.



RoHS limits the use of six hazardous substances: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ether (PBDE). Tripp Lite manufactures hundreds of RoHS-compliant products—including SmartOnline UPS Systems—which can be identified by the RoHS logo. Successful recycling initiatives also allow most components to reenter the supply chain instead of landfills.

CENTRALIZE POWER MANAGEMENT

You can use the included PowerAlert Network Management System to manage the Economy Mode settings of SmartOnline UPS Systems manually or define a schedule to turn Economy Mode on and off automatically. You can also schedule automated equipment idling through remotely switchable UPS outlet banks or Tripp Lite Switched PDU outlets. Remotely switchable outlets that aren't being used can be locked out to prevent unauthorized loads that increase the risk of circuit overloads.



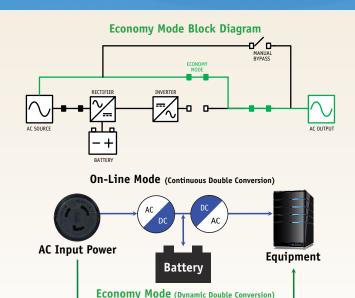
PowerAlert Network Management System can control Economy Mode settings and remotely switchable outlets for hundreds of SmartOnline UPS Systems and PDUs over your network from a single workstation.

ECONOMY MODE OPERATION

When a SmartOnline UPS System operates in on-line mode, it continuously converts AC input power to DC (battery) power and converts DC power to regulated AC output power. Continuous double conversion produces ideal output, but does not provide maximum efficiency.

In Economy Mode, the UPS increases efficiency through dynamic double conversion (also known as on-line on demand), which means it suspends or resumes double conversion automatically as the quality of input power changes. While input power quality is satisfactory, the UPS system suspends double conversion and operates with maximum efficiency. If input power quality deviates from the designated safe operating range, the UPS system resumes double conversion until input power quality improves.

Using the included PowerAlert software, you can turn Economy Mode on or off at any time, from any location. You can also schedule Economy Mode, allowing the UPS system to provide maximum protection during peak hours and maximum efficiency during off-peak hours.



TRIPP·LITE DATA CENTER SOLUTIONS



SPECIFICATIONS

									RoHS
UPS Series	Economy Mode	Capacity	Topology	Form Factor	Expandable Runtime (1)	Internal Card Slot	Hot-Swappable Batteries	Hot-Swappable Power Module(s)	Pure Sine Wave Output
SmartOnline	Yes	750 VA to 5 kVA	On-Line	Tower or Rack/Tower	Yes	Yes	Yes	No	Yes
SmartOnline Hot-Swappable	Yes	5 to 20 kVA	On-Line	Rack/Tower	Yes	Yes	Yes	Yes	Yes
SmartOnline Modular 3-Phase	Yes	40 to 80 kVA (160 kVA in Parallel)	On-Line	Tower	Yes	Yes	Yes	Yes	Yes

Power Management Accessories

1 own management recoccers							
SNMPWEBCARD	Internal card adds Ethernet network interface to compatible UPS systems for remote monitoring and control via SNMP, Web, SSH or telnet.						
ENVIROSENSE	Environmental sensor connects to SNMPWEBCARD and compatible PDUs for remote monitoring of temperature, humidity and dry contacts.						
MODBUSCARD	Internal card adds interface for Modbus RTU industrial communications protocol, RS-422/485 and RS-232 to compatible UPS systems.						
RELAYIOCARD	Internal card adds programmable contact closure interface to compatible UPS systems. Includes 6 output contacts and 1 input contact.						

Certifications vary by model. (1) Requires external battery packs, sold separately.



PRODUCT SELECTOR GUIDES

Go to **www.tripplite.com/selectors** to access Tripp Lite's dynamic product selector guides. Refine choices according to your feature requirements, then compare compatible models to find the ideal product for your application. Selectors for UPS systems, PDUs, replacement UPS batteries, racks, KVM switches, surge suppressors, inverters and cables are available.

ABOUT TRIPP LITE

Since 1922, Tripp Lite has established a global reputation for quality manufacturing, superior value and excellent service. Tripp Lite makes more than 2,500 products to power, protect and connect electronic equipment, including UPS systems, replacement batteries, PDUs, rack systems, cooling solutions, surge suppressors, cables, KVM switches, IP console servers, power strips and inverters. Headquartered in Chicago, Tripp Lite maintains offices worldwide. Learn more at www.tripplite.com.

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TRIPP LITE WORLD HEADQUARTERS

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