

APC Back-UPS CS • APC Back-UPS LS

**Advanced backup power  
and surge protection  
for your PCs and  
workstations.**



## FEATURES

- » Lightning and surge protection to protect data and shield equipment.
- » Include ports for battery backup/surge protection, surge-protection only, and phone-line protection.
- » User-replaceable, hot-swappable batteries eliminate need to send UPS out for service.
- » Easily monitor battery status to ensure reliability.
- » Enough space for transformer blocks.
- » Cold-start capabilities.

## OVERVIEW

The APC® Back-UPS® CS/Back-UPS LS series of uninterruptible power supplies (UPS) helps you stay connected and protected when the power goes down.

Each model protects your PCs, monitors, printers, modems, drives, and other peripherals from all sorts of utility-line malfunctions that can damage or destroy sensitive equipment and data.

### Three modes of protection

All Back-UPS CS/Back-UPS LS models offer three modes of protection: battery backup, surge protection, and phone/fax/DSL line protection.

When a power blackout, brownout, or some other type of interference hits your system or when utility voltage is outside acceptable limits, the UPS automatically transfers power loads to the battery. This gives you enough time to save valuable work. An Unattended Shutdown feature even ensures that files are saved and your operating system shuts down properly in case of a sustained power outage.

Once the initial problem has been corrected, the UPS switches power back to the primary utility power source.

Power too low? These UPSs take care of that, too. Continuous line conditioning and automatic volt regulation smooth out the highs and lows of power reaching your equipment.

You can also cold-start the UPS; that is, you can start up the Back-UPS CS/Back-UPS LS and power the loads even when there's no utility power provided—you use battery power instead. This is particularly helpful when you need to access your computer for a short time during a power outage.

Full-time surge suppression protects your equipment from power swells and spikes from lightning strikes and other power anomalies. In addition, full-time noise filtering prevents data-file corruption.

### The actual outlets

The Back-UPS CS/Back-UPS LS units feature a combination of the following NEMA 5-15R outlets and an RJ-11 jack: Battery backup outlets, which provide battery backup, surge protection, and EMI filtering. In case of a power outage, battery power is automatically provided to these outlets. Power (utility or backup) isn't supplied to these outlets when the Back-UPS CS/ Back-UPS LS is switched off. These outlets are ideal for connecting a computer, monitor, CD drive, or some other device that requires uninterrupted operation.

Surge-only outlets are always on (when utility power is available) and are not controlled by the on/off switch. Unlike the battery backup outlets, the surge-only outlets don't provide power during a power outage. You use them to connect non-data-sensitive equipment, such as a printer, fax machine, or scanner. The surge-only outlets work without reducing the available power or battery capacity for the devices plugged into the battery backup ports, so you get maximum battery power for a computer or monitor that must be up and running at all times.

Two of the sockets on all Back-UPS CS/Back-UPS LS units are spaced far enough apart to enable you to plug in transformer blocks without blocking access to the other receptacles.

The RJ-11 telephone jack provides lightning surge protection for any device connected to your telephone line, whether it's a phone, computer, modem, or fax machine. This jack is compatible with HPNA and DSL standards, as well as all modem data rates.

### Advanced diagnostics

Use the front-panel test switch to mimic a power failure and initiate an actual transfer to backup power. You can also estimate battery-backup time and determine when the battery needs to be replaced.

Audible alarms warn you of changing UPS and utility power conditions in your application, such as when the Back-UPS CS/Back-UPS LS is on battery, when the battery is low, or when the connected equipment exceeds the rated load for the UPS and, in turn, causes a power overload condition.

What's more, a site wiring fault indicator warns you immediately of wiring problems, like improper grounds, that can cause shocks or prevent the the UPS from adequately suppressing surges.

All Back-UPS CS/Back-UPS LS units feature user-replaceable batteries too, so you don't waste time when it comes time to service the unit. When the Replace Battery indicator lights, simply hot-swap an old battery with a new one—there's no need to repackage and send back the UPS. You can even change batteries without powering down the connected equipment. Microprocessor-controlled battery charging ensures maximum battery life.

And there's no need to return the Back-UPS CS/Back-UPS LS to the factory because of a worn-out fuse, either. All units have a circuit breaker instead. To reset the unit for overload recovery, just push a button.

### APC Back-UPS CS (BK350, BK500, BK500BLK)

The Back-UPS CS gives your office and home-office systems professional-grade power protection. With the Back-UPS CS, you can be sure that your office systems and their valuable data don't fall prey to dangerous power surges, spikes, and blackouts.

Beige-colored UPSs are available with either 350- or 500-volt protection on their six NEMA 5-15R outlets (three for battery backup and surge protection; and three for surge-protection only). The 500-volt model is also available in black. The Back-UPS CS also offers two-wire, single-line protection for your phone, fax, modem and even DSL lines!

Having a USB port handy means you don't have to give up a regular serial port to manage the unit. Plus, setup is easier. There's even a USB cable provided with the unit, as well as cord-management straps to keep connections tidy.

The included software CD, which includes APC Shutdown Manager and PowerChute Personal Edition, gives you sophisticated power management capabilities. The software is compatible with Windows® 98/Me, Windows XP, Windows 2000, and Mac® OS 9.0.4 or higher.

### APC Back-UPS LS (BP500CLR, BP500UC)

Featuring four battery-backup/surge-protection NEMA 5-15R outlets and three surge-protection-only NEMA 5-15R outlets, the Back-UPS LS offers the leading-edge power protection for your high-performance computer systems. The LS series includes Automatic Voltage Regulation (AVR), which corrects low-voltage conditions (brownouts) without draining its battery supply, so you'll have battery power for when you most need it.

It's also equipped with a four-wire, dual-line RJ-11 interface for attaching fax, modem, or DSL lines, so you have protection against surges and spikes that travel through these types of connections.

Designed for the ultimate user comfort, the LS has a compact shape with its outlets located conveniently on top, and for at-a-glance diagnostics, you can see alarm indicators from any angle.

The APC Back-UPS LS also has a handy USB port, which means you don't have to give up a regular serial port on your PC or Mac® to manage the UPS. We even provide a USB cable with the Back-UPS LS, as well as cord-management straps to keep your connections from becoming unwieldy.

The BP500CLR has a clear case that coordinates well with iMac® computers, and the BP500UC has a charcoal case. The file-saving software included with each UPS features APC Shutdown Manager and PowerChute Personal Edition, and is compatible with Windows 98/Me, Windows 2000, Windows XP, and Mac OS 9.0.4 or higher.

## Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p.m. and you need help, but your vendor's tech support line is closed.

According to a survey by *Data Communications* magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application. Don't waste time and money—call Black Box today.



BP500CLR

## TECH SPECS

### Specs Text Roman — APC Back-UPS CS (BK350, BK500, BK500BLK):

**Approvals** — FCC Part 15, Class B; UL® 1778; cUL Listed  
**Battery Type** — Leakproof, maintenance-free sealed lead-acid battery with suspended electrolyte  
**Chassis Color** — Beige  
**Cord Length** — 6 ft. (1.8 m)  
**Diagnostics** — Audible alarms: Alarm when on battery; distinctive low battery alarm; overload continuous tone alarm  
**Input Frequency** — 50/60 Hz  $\pm$ 3 Hz (autosensing)  
**Input Voltage (Nominal)** — 120 volts  
**Input Voltage Range for Mains Operations** — 98–140 volts  
**On-line Thermal Dissipation** — BK350: 20 BTU/hour;  
 BK500, BK500BLK: 24 BTU/hour  
**Output Power Capacity** —  
 BK350: 350 VA, 210 watts;  
 BK500, BK500BLK: 500 VA, 300 watts  
**Output Voltage (Nominal)** — 120 volts  
**Phone Line Protection** — RJ-11 modem/fax/DSL (two-wire, single-line)  
**Run Time** — Typical backup time:  
 BK350: At half load: 18.1 minutes (105 watts);  
 At full load: 4.7 minutes (210 watts);  
 BK500, BK500BLK: At half load: 13.9 minutes (150 watts);  
 At full load: 2.4 minutes (300 watts)  
**Surge Energy Rating** — 480 joules  
**Surge Filtering** — Full-time multipole noise filtering; 5% IEEE surge let-through; zero clamping response time; meets UL® 1449  
**Connectors** — Interface:  
 Serial: (1) DB9 (RS-232);  
 USB: (1) Type B;  
 Input: (1) NEMA 5-15P;  
 Output: (3) NEMA 5-15R with battery backup and surge protection, (3) NEMA 5-15R with surge protection only  
**Indicators** — (4) LEDs: On Line, On Battery, Replace Battery, Overload  
**Temperature Tolerance** — Operating: 32 to 104°F (0 to 40°C);  
 Storage: 5 to 113°F (-15 to +45°C)  
**Humidity Tolerance** — Up to 95%, noncondensing  
**Size** — 6.5"H x 3.6"W x 11.2"D (16.5 x 9.1 x 28.5 cm)  
**Weight** — BK350: 12.5 lb. ( 5.7 kg);  
 BK500, BK500BLK: 13.8 lb. (6.3 kg)

### APC Back-UPS LS (BP500CLR, BP500UC):

**Approvals** — FCC Part 15, Class B; FCC Part 68; UL® 1778; CSA  
**Battery Type** — Leakproof, maintenance-free sealed lead-acid battery with suspended electrolyte  
**Chassis Color** — BP500CLR: Clear;  
 BP500UC: Charcoal  
**Cord Length** — 6 ft. (1.8 m)  
**Data Line Protection** — RJ-11 modem/fax/DSL (four-wire, dual-line)  
**Diagnostics** — Audible alarms: Alarm when on battery; distinctive low battery alarm; overload continuous tone alarm  
**Input Frequency** — 50/60 Hz  $\pm$ 3 Hz (autosensing)  
**Input Voltage (Nominal)** — 120 volts  
**Input Voltage Range for Mains Operations** — 93–130 volts  
**Output Power Capacity** — 500 VA, 315 watts  
**Output Voltage (Nominal)** — 120 volts  
**Run Time** — Typical backup time:  
 At half load: 14.1 minutes (157.5 watts);  
 At full load: 3.6 minutes (315 watts)  
**Surge Energy Rating** — 420 joules  
**Surge Filtering** — Full-time multipole noise filtering; 5% IEEE surge let-through; zero clamping response time; meets UL® 1449  
**Connectors** — Interface: (1) USB Type B;  
 Input: (1) NEMA 5-15P;  
 Output: (4) NEMA 5-15R with battery backup and surge protection, (3) NEMA 5-15R with surge protection only  
**Indicators** — (4) LEDs: On Line, On Battery, Replace Battery, Overload  
**Temperature Tolerance** —  
 Operating: 32 to 104°F (0 to 40°C);  
 Storage: 5 to 113°F (-15 to +45°C)  
**Humidity Tolerance** — Up to 95%, noncondensing  
**Size** — 9.4"H x 5"W x 7.9"D  
 (23.9 x 12.7 x 20.1 cm)  
**Weight** — 15.8 lb. (7.2 kg)

Item	Code
APC Back-UPS CS	
Beige	
350 (210-W/350-VA)	<b>BK350</b>
500 (300-W/500-VA)	<b>BK500</b>
Black	
500 (300-W/500-VA)	<b>BK500BLK</b>
APC Back-UPS LS	
Clear	
500 (315-W/500-VA)	<b>BP500CLR</b>
Charcoal	
500 (315-W/500-VA)	<b>BP500UC</b>

If you need information on PowerChute® and PowerChute Pro Software, please request Product Data Sheet 17219.