BLACK BOX®
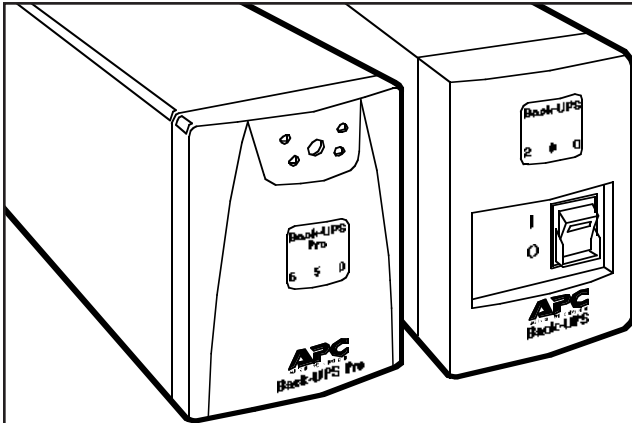## NETWORK SERVICES

Back-UPS™ Series/Back-UPS™ Pro Series/Back-UPS™ Office

Advanced backup power for your PCs and high-performance workstations.

With all these models to choose from, you can pick the one that gives you exactly the protection you need for your equipment.

Key Features

▶ ***£16,000 lifetime equipment protection.***

▶ ***User-replaceable batteries eliminate need to send UPS out for service.***

▶ ***Easily monitor status of battery to ensure reliability.***

▶ ***Lightning and surge protection to protect data and shield equipment.***

▶ ***Hot-swappable batteries.***

▶ ***Space for transformer blocks.***

▶ ***Increased voltage capacity and run time.***

New and improved, the Back-UPS™, Back-UPS™ Pro Series, and Back-UPS™ Office uninterruptible power supplies (UPS) help you stay connected *and* protected when the power goes down.

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

When a power blackout, brownout, swell, sag, surge, or other interference hits your system, the UPS automatically transfers power loads to a battery. This battery gives you enough time to save information and properly shut down your programs and save valuable work. Once the initial problem has been corrected, the UPS switches power back to the primary utility power source.

Or choose the Continuous Power Switch—it provides power during scheduled UPS maintenance.

Back-UPS™ Series

The Back-UPS™ Series is the best choice for protection for your PC workstations, 486 network workstations, or multimedia systems. You get the backup power you need to protect even the most minor applications from electrical damage.

You can adjust the UPS so power isn't transferred to the battery too often. Alarms warn you of impending utility failures or low-battery conditions.

User-safe, hot-swappable batteries let you replace them without powering down your equipment or sending the UPS in for service. A site-wiring-fault indicator identifies possible wiring faults so you can address the problem before it causes serious damage.

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.

A remote-computer interface on versions 300, 500, and 650 gives you the option of installing PowerChute® software that automatically shuts down your equipment if necessary.

Back-UPS™ Pro Series

The Back-UPS™ Pro Series is the best power-protection choice for advanced workstations running Windows® 95 or 98 and other major operating systems.

The Pro Series models PS329AE-R2, PS330AE-R2, and PS331AE-R2 include PowerChute® Pro for Windows 3.x., Windows® 95. Windows NT™, OS/2® for Workstations, and Windows for Workgroups. These software

packages work with the UPS to save and protect valuable data, and to shut down your applications properly.

A power management feature integrated into the Back-UPS® Pro enables you to continue working through under- and overvoltages by supplying the correct amount of power for your electronic equipment.

The outlets themselves are placed with enough space to accommodate larger transformer plugs. This series also offers user-safe, hot-swappable batteries and a site-wiring-fault indicator. The batteries are charged during normal operation for increased efficiency and reliability.

Save! Warehouse clearance models are ideal if you can get by with lower voltages and run times. But hurry! We don't have many left.

Specifications: Back-UPS™ Pro Series

(Clearance—see page 4 for new models.)

Diagnostics: Indicators and software

Run Time:
PS329AE-R2: 5 min. w/200 VA;
PS330AE-R2: 7 min. w/250 VA;
PS331AE-R2: 5 min. w/400 VA;
   Surge Capability: 320 joules, 0 ns, instantaneous, normal-mode surge voltage let-through when subjected to IEEE 587 Cat. A 6k VA test is less than 5% of test peak voltage

Interface: DB9 serial port

Indicators: Front: On-line, UPS overload, replace battery, on-battery; Rear: Site warning fault, input circuit breaker

Connectors:
PS329AE-R2: DB9 interface port, (2) NEMA 5–15R receptacles; (2) RJ-11/RJ-45 (telco or 10BASE-T);
PS330AE-R2–PS331A: DB9 interface port, (4) NEMA 5–15R receptacles; (2) RJ-11/RJ-45 (telco or 10BASE-T);
   Power: Primary voltage: 240V single phase, 50 or 60 Hz

±5% (autosensing)

Size: PS329AE-R2:
   15 x 8.6 x 33.8 cm;
PS330A–PS331AE-R2:
   16.8 x 11.9 x 36.1 cm;
PS332A–PS333A:
   21.6 x 17 x 43.9 cm

Weight:
PS329A: 6.7 kg;
PS330A: 8 kg;
PS331A: 9.7 kg;

Choose the Continuous Power Switch (CPS) for continuous power availability for critical equipment during UPS maintenance.

17202/17233

Specifications: Back-UPS™ Pro Series, new and improved

Diagnostics: (4) Front-panel LEDs: on-line, on-battery, UPS overload, replace battery; BP350U, 500U: (1) building wiring fault indicator; Audible alarms: on battery, low battery, UPS overload, replace battery

Noise Suppression: BP350U, BP500U: full-time EMI/RFI filtering

Let Through: BP350U, BP500U: <350V

Battery: Hot-swappable, maintenance-free lead acid

Run Time: PSU329AE-R2: 7-13 min. w/280 VA; PSU330AE-R2: 12-18 min. w/420 VA; PSU331AE-R2: 35-40 min. w/650 VA

Surge Capability: BP280S, BP420S, BP650S: 320 joules, 0 ns

Connectors: BP280S: (3) block-safe outlets, (1) DB9 interface port; BP350U, BP500U: (7) block-safe outlets; (2) DB9 interface ports; (1) USB interface port; BP420S: (6) block-safe outlets, (3) DB9 interface ports; BP650S: (6) block-safe outlets, (3) DB9 interface ports

Interface: DB9 serial port

Power Management: BP350U, BP500U: USB port, Windows 98 integrated software

Run Time: BP280S: 7 min. @ 170W; BP350U (full load): 5 min. @ 220W; BP420S: 5 min. @ 210W; BP500U (full load): 5 min. @ 315W; BP650S: 6 min. @ 210W

Recharge Time: BP350U, BP500U: 6-8 hours

Auto Voltage Regulation: BP350U, BP500U: increases output voltage by 15% when between 92 and 106 VAC

Power: Primary voltage: 120 VAC, 60 Hz

Size: BP280S: 5.9"H x 3.4"W x 13.3"D (15 x 8.6 x 33.8 cm); BP420S, BP650S: 6.6"H x 4.7"W x 14.2"D (16.8 x 11.9 x 36.1 cm); BP350U, BP500U: 9.4"H x 5"W x 7.9"D (23.9 x 12.7 x 20.1 cm)

Weight: BP280S: 16.6 lb. (7.5 kg); BP350U: 14.2 lb. (6.4 kg); BP420S: 21.6 lb. (9.8 kg); BP500U: 15.4 lb. (7 kg); BP650S: 25 lb. (11.3 kg)

▼ Ordering Information

ITEM	CODE
Back-UPS® Series, new and improved	
Back-UPS 300MI	PSU300MI
Back-UPS 500MI	PSU500MI
Back-UPS 650MI	PSU650MI
Back-UPS Pro, new and improved	
Back-UPS Pro 280	PSU329AE-R2
Back-UPS Pro 420	PSU330AE-R2
Back-UPS Pro 650	PSU331AE-R2

*If you need information on **PowerChute®** and **PowerChute Pro Software**, please request document number **17219**.*

Specifications: Back-UPS™ Series, new and improved

Diagnostics: (2) LEDs: UPS on, site-wiring fault; Audible Alarms: on battery, low battery, UPS overload

Run Time: BK200: 7 min. w/200 VA; BK300: 10-15 min. w/300 VA; BK500M: 15-20 min. w/500 VA; BK650M: 30-35 min. w/650 VA

Surge Capability: 240 joules, 6500 A, 0 ns, <5 ns typical

Connectors: BK200, BK300: (2) NEMA 5-15 outlets, DB9 serial interface port; BK500M: (3) transformer-sized outlets, DB9 serial interface port; BK650M: (6) transformer-sized outlets, DB9 serial interface port

Indicators: (2) LEDs: UPS ON, site wiring fault

Power: Primary voltage: 120 VAC single phase, 60 Hz ±5%

Size: BK200, BK300, BK500M: 15.2 x 8.6 x 33.3 cm; BK650M: 16.8 x 11.9 x 36.1 cm

Weight: BK200, BK300: 5.9 kg; BK500M: 7 kg; BK650M: 10.4 kg