Back-UPS HS
APC BACK-UPS HS 500VA 120V

APC Back-UPS HS, 300 Watts / 500 VA,Input 120V / Output 120V

Includes: Cat6 Ethernet Cable, Cord management straps, Documentation CD, Installation guide, User Manual

Standard Lead Time: Usually in Stock

BH500NET Features

Resettable circuit breakers	Enables a quick recovery from overload events.
User-replaceable batteries	Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR)
Transformer-block spaced outlets	Protect equipment with input transformer blocks without blocking access to other receptacles.
Safety-agency approved	Ensures the product has been tested and approved to work safely with the connected service provider equipment and within the specified environment. UL, FCC, CE, C-Tick approvals.
Network manageable	Provides remote management of the UPS over the network.

Back-UPS HS Features & Benefits

Protection	
Data line surge protection	Provides protection of connected equipment from power surges on the data lines.
Manageability	
Web Management	Manage Linux, Unix, Sun and Windows 2003 servers and other devices.
10/100 BaseT Connection	This reduces a major risk of downtime by providing detailed reports on battery age, load, health, etc facilitating the timely replacement of UPS batteries.
Browser Accessible	View the user interface with a browser. Provides quick access from anywhere on a secure network.
Remote device management	Remote monitoring of critical conditions for maximum protection against environmental and physical threats.
Convenience	
Audible Alarms	Provides notification of changing utility power and UPS conditions.
Automatic self-test	Periodic battery self-test ensures early detection of a battery that needs to be replaced.
Battery replacement without tools	Allows quick, easy battery replacement.
Cold-start capable	Provides temporary battery power when the utility power is out.
Cord management	Reduces cord clutter.
Hot-swappable batteries	Ensures clean, uninterrupted power to protected equipment while batteries are being replaced
LED status indicators	Quickly understand unit and power status with visual indicators.

Output

|	
Output Power Capacity	300 Watts / 500 VA
Max Configurable Power	300 Watts / 500 VA
Nominal Output Voltage	120V
Output Connections	(4) NEMA 5-15R (Battery Backup)

Input

Nominal Input Voltage	120V
Input Frequency	47 - 63 Hz
Input Connections	NEMA 5-15P
Cord Length	2.44 meters

Batteries & Runtime

Battery Type	Maintenance-free sealed Lead-Acid battery with suspended electrolyte : leakproof
Typical recharge time	8 hour(s)
Replacement Battery	RBC2, RBC2J
RBC™ Quantity	1
Typical Backup Time at Half Load	10.5 minutes (150 Watts)
Typical Backup Time at Full Load	1.7 minutes (300 Watts)
Runtime Chart	Back-UPS HS

Energy Use/Efficiency
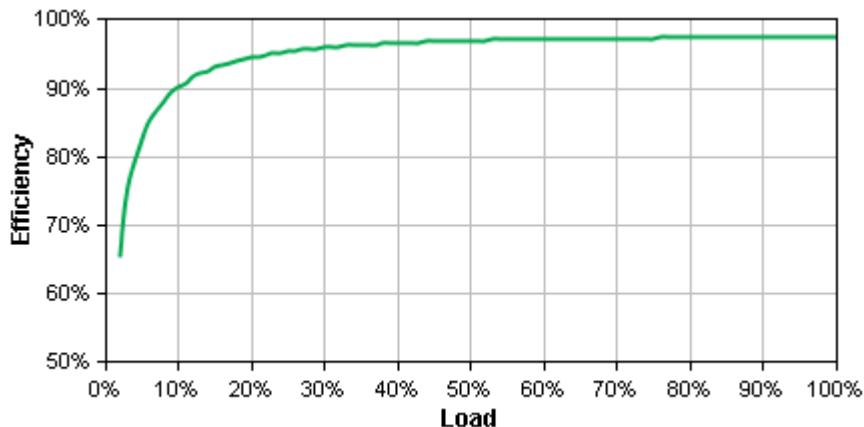
Curve fit to measured efficiency data. All measurements taken in normal operating mode, at typical environmental conditions, with nominal electrical input and resistive load output.

Communications & Management

Control panel	LED status display with On Line : On Battery : Replace Battery and Building Wiring Fault,Network link status LED
Audible Alarm	Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm

Surge Protection and Filtering

Surge energy rating	800 Joules
Data Line Protection	RJ-11 Modem/Fax/DSL protection (two wire single line),RJ45 10/100 Base-T Ethernet protection,Co-axial Video / Cable protection

Physical

Maximum Height	372.00 mm
Maximum Width	225.00 mm
Maximum Depth	105.00 mm
Net Weight	7.42 KG
Shipping Weight	8.41 KG
Shipping Height	470.00 mm
Shipping Width	305.00 mm
Shipping Depth	165.00 mm
Master Carton Units	2.00
Master Carton Weight	37.05 lbs.
Color	Beige
SCC Codes	1073130420640 5
Units per Pallet	20.00

Environmental

Operating Environment	0 - 40 °C
Operating Relative Humidity	5%
Operating Elevation	0-3000 meters
Storage Temperature	-15 - 45 °C

Storage Relative Humidity	0%
Audible noise at 1 meter from surface of unit	0.00 dBA

Conformance

Regulatory Approvals	cUL Listed,FCC Part 15 Class B,FCC Part 68,Industry Canada,UL Listed
Standard Warranty	3 years repair or replace

**The time to recharge to 90% of full battery capacity following a discharge to shutdown using a load rated for 1/2 the full load rating of the UPS.

8. Following installation, the Back-UPS HS software is available in the **Start** menu. Upon launching the program, it searches for all Back-UPS HS devices on the network, and will identify them as shown in Figure 8 by IP Address and MAC Address. The IP Address is automatically assigned to the Back-UPS by the DHCP services from your hub or router. IP Addresses assigned by the DHCP service may automatically change over time. Thus, APC recommends you do not bookmark the IP Address, as you may not be able to access it through your browser. The MAC Address is assigned to the Back-UPS HS 500 at the factory.
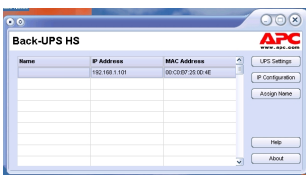
Figure 8. Back-UPS HS IP Address and MAC Address Screen

9. If there are no DHCP services on the network, or if you want to assign an IP Address you can easily remember, you can manually assign an IP Address to the Back-UPS by clicking on the **IP Configuration** button. The address you assign must follow the format shown in Figure 9 and cannot duplicate an address already assigned. Figure 10 shows the IP Configuration Screen with the IP Address fields set to zero (0).

To assign an IP Address to your computer, please read and follow the directions that came with your computer.
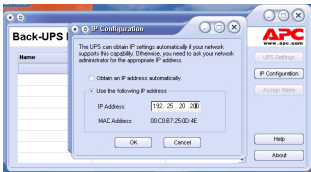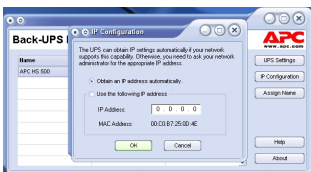

Figure 9. Assign IP Address Screen

Figure 10. Blank Assign IP Address Screen

10. You can assign a name to the Back-UPS by clicking on the **Assign Name** button (Figure 8) and entering the name in the Assign Name Screen dialog. It will appear in the column to the left of the IP Address of the device (Figure 11). Names should not be duplicated.
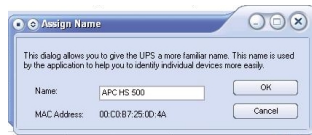

Figure 11. Assign Name Screen

11. To reset the Back-UPS HS to factory default values, use the UPS Settings button. If the Back-UPS HS does not reset using the software, remove the Battery Cover and insert a small object (about 2 inches in length) into the hole located next to the telephone jack (Figure 12) for approximately 5 seconds. **Note**: The telephone jack is provided for factory testing only - do not connect anything to this jack).
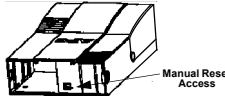

Figure 12. Manual Reset Access

12. Before performing any UPS maintenance task, check the Status of the UPS by clicking on the **Status** link. The screen shown in Figure 13 will be displayed.
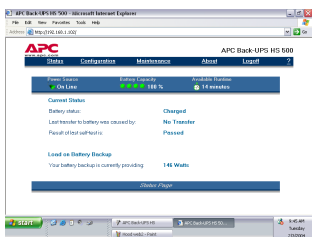

Figure 13. Back-UPS HS 500 Status Screen

13. To change the configuration of the Back-UPS or perform UPS maintenance, you must log on to the web page (Figure 11) by clicking on the **UPS Settings** button.

When this page is displayed, enter a default **Username** of **apc**, and a default **Password** of **apc**. To change the **Username** or **Password**, you must log on and then click **Maintenance** (Figure 14).

Note: You can also access the **Logon Page Screen** by entering the **IP Address** into the **Address line** of your browser.
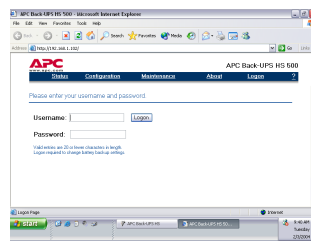

Figure 14. Log On Screen

14. Using the **Maintenance Screen** (Figure 15), you can perform a **Battery Self-Test**, **Update the Battery Replacement Date**, Change the **User Name** or **Password** (as previously discussed) then click **Update Now**, or you can **Restore Factory Defaults**. Note: You must be logged on to perform any of these tasks.
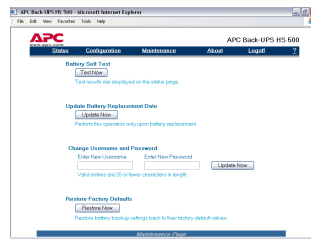

Figure 15. Maintenance Page Screen

15. Using the **Configuration Page Screen** (Figure 14), you can adjust the **Sensitivity** of the Back-UPS. By adjusting the Sensitivity, the Back-UPS will allow the unit to switch to battery power depending on the quality of the AC utility power being supplied to the unit. Use of the Sensitivity settings are for the following conditions:

Low - Use only for extreme conditions of low input voltage. Not recommended for computer loads.

Medium - Back-UPS frequently goes On Battery due to low input voltage (recommended).

High - Connected equipment is sensitive to low voltage.

The **Configuration Page Screen** also allows you to **enable** or **disable** the **Audible Alarm**. If enabled, this alarm operates as described in the *Status Indicators and Alarms* section of this manual. If disabled, the Back-UPS will quiet the alarm.

Additionally, the **Configuration Page Screen** allows you to adjust the voltage **Transfer Points**. The Back-UPS will transfer to **On Battery** operation at input voltages **Above** or **Below** the points selected in the drop-down **Volts** menu.

Finally, the **Configuration Page Screen** provides **Output Control** for the four outlets of the Back-UPS. Control consists of switching power **On** or **Off** at **Output 1**, **Output 2**, or the two outlets of **Output 3**. It also allows you to **Reboot** loads by automatically switching power **Off** and then **On** at the selected outlet. If an outlet is switched **Off**, it cannot be rebooted.

To use the **Configuration Page Screen**, you must be logged on to the Back-UPS. Select the desired function and click on the **Apply** button. To reset the unit to the factory defaults, click the **Reset** button.

Figure 16. Configuration Page Screen

16. The **About Page Screen** provides general information about your Back-UPS including **Network Parameters (IP and MAC Addresses)**, as well as **Technical Parameters (Model, Serial Number, Firmware Revision, Web Firmware Revision, UPS Date of Manufacture,** and **Battery Replacement Date)**.
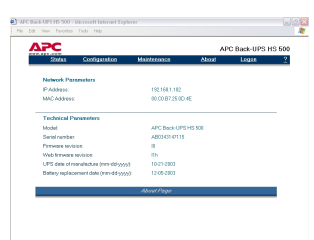

Figure 17 About Page Screen

Specifications

Input Voltage (On Line)	95 - 142 Vac
Input Frequency	47 - 63 HZ (autosensing)
Output Wave Form (On Battery)	Stepped Sine Wave
Maximum Load	500 VA 300 Watts
Operating Temperature	32 - 104° F (0 to 40° C)
Storage Temperature	5 - 113° F (-15 to 45° C)
Operating Humidity	10 - 90% non-condensing
Storage Humidity	10 - 95% non-condensing
Physical: (D x W x H)	14.65 x 8.85 x 4.13 in (37.2 x 22.5 x 10.5 cm)
Weight	16.3 lb (7.4 kg)
Typical Recharge Time	6 - 8 hours
EMI Classification	FCC Part 15
Approvals	cTUVus, FCC Part 15 FCC Part 68, Industry Canada