

120V/208V

APC[®]
Legendary Reliability[®]

Server and Network Power Solutions

Smart-UPS[®]

Performance power protection
for servers and networks



Complete Power Protection

Reliability—Availability—Manageability: The three essential requirements when choosing power protection for your systems.

Reliability: Consistent Delivery of Dependable Performance



Line-interactive design delivers unmatched performance and reliability

Innovative line-interactive design uses the DC to AC power inverter “in reverse”, like a battery charger, during normal operation, providing greater performance and efficiency.

Sine-wave output

APC Smart-UPS sine-wave output provides assurance of compatibility with all loads. (Does not apply to SU420NET/SU620NET models)

Network-grade line conditioning prevents glitches

Full time EMI/RFI filters prevent line noise from causing data errors. Smart-UPS meets Novell and Microsoft’s approval for network protection, without the need for additional external conditioners.

Site wiring fault indicator saves you trouble and expense

Alerts you to potential problems, such as missing ground and reversed polarity, two common wiring mistakes which usually require an electrician to diagnose. (120VAC models only)

Lightning and surge protection protects hardware

When measured via ANSI/IEEE 587 Category “A” and “B” tests, the suppression performance of the APC Smart-UPS is superior to virtually all separate surge suppressors.

Pre-failure diagnostics

Smart-UPS continuously monitors its health and proactively informs you of the results via Web, SNMP, e-mail or paging.

Automatic self-test

All APC Smart-UPS initiate a self-test when power is turned on and every 2 weeks, as well as at the push of a button and at pre-determined times (using software). This ensures that you will be alerted of failing batteries before they wear out.

Smart-UPS XL offers N+1 batteries for redundancy and fault tolerance

The Smart-UPS XL’s external battery packs run in parallel with the internal batteries providing redundancy and higher fault tolerance.

Graceful, unattended shutdown

In the event of an extended power outage, an APC Smart-UPS will interface with PowerChute Business Edition via the serial port to perform automatic safe shutdown of the attached system. Power failures can occur at night, on weekends or while the system administrator is out of the building, making automatic, safe shutdown critical. Smart-UPS provides unattended, safe shutdown of many operating systems, including Microsoft Windows Server 2003, NT/2000/XP, Novell Netware, Linux and SCO Unixware (other OSs available separately). By using PowerChute Business Edition software you can manage and diagnose power problems.

• Safely shut down a single server via serial cable

The Smart-UPS communications port provides the coordination of a safe shutdown with most popular operating systems by Microsoft, Novell, HP, IBM, Sun, SCO, Linux, and others.

• Safely shut down multiple servers via serial cable

APC has several solutions to shut down multiple servers. The 2-Port Interface Expander Card (AP9607) provides two additional ports. The 8-Port Interface Expander (AP9207) provides a total of eight ports and can be daisy-chained to provide 15 ports. Both accessories facilitate graceful system shutdown via dependable hardware connections and allow advanced UPS management. The units are ideal for “server farms” or multiple operating system environments.

• Safely shut down multiple servers via network connection

APC PowerChute Network Shutdown software communicates across the network to Smart-UPS equipped with an APC Web/SNMP card, providing reliable, graceful, unattended shutdown of multiple computer systems over the network.

Availability: Minimize Downtime, Maximizing Performance and Uptime

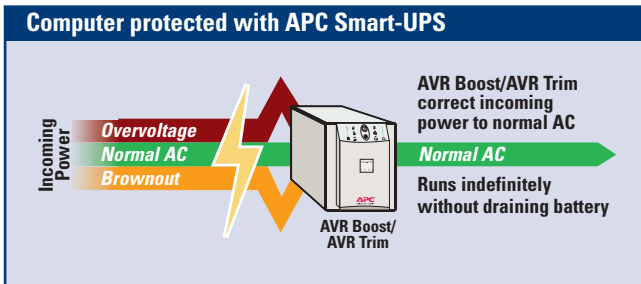
Automatic Voltage Regulation

AVR Boost automatically corrects brownout conditions

Allows you to work through brownouts without unnecessary battery drain. AVR boost automatically steps low voltage up to safe output levels.

AVR Trim automatically corrects overvoltage conditions

Allows you to work through over voltages without unnecessary battery drain. AVR Trim automatically steps high voltage down to safe output levels.



Intelligent Battery Management

CellGuard means longer battery life

Improved reliability results from a precision battery charging system and automatic true-load battery tests. Redundant over-charge protection contributes to longer battery life. AVR Boost and AVR Trim regulate under voltages and over-voltages without switching to battery.

Battery Replacement Warning prevents downtime

APC Smart-UPS automatically performs a self-test every two weeks. This ensures you will be alerted to failing batteries before they wear out. You can perform self-tests anytime, through software or the push of a button.

Faster Recharge Time

The APC Smart-UPS battery charging system is microprocessor-controlled to precisely charge batteries in less time than legacy UPS systems. This makes your system available more quickly for subsequent power disturbances.

Extended Runtime

The Smart-UPS XL allows scalable runtimes through the addition of external battery packs, creating customized availability solutions.

QuickSwap™

The 60 second, user-friendly, hot-swappable battery replacement system

Saves the time and expense of returning the UPS to the factory for battery service and allows safe and easy replacement of batteries while your system is up and running. Replacement battery kits ship in a reusable box for convenient return of exhausted batteries to a recycling center or to APC.



Prevent Downtime

Predict failures

By periodically conducting self-tests and other diagnostics, Smart-UPS can warn you of failures before they happen. For example, Smart-UPS will proactively notify you 6-8 weeks in advance of a needed battery replacement.

Deliver diagnostic data

Smart-UPS constantly monitors its health and delivers the results via Web, SNMP, e-mail, or paging.

Take Action

The built-in SmartSlot bay gives Smart-UPS the ability to take necessary actions to reboot "hung" devices, giving you availability when you need it most.

- Reboot hung servers and networking equipment remotely using modem (out-of-band) with the Out-of-Band Management card (AP9608).
- Reboot hung servers via Web, SNMP, or Telnet (in band) using the Web/SNMP Management card (AP9606 or AP9603).
- Reboot hung servers and networking equipment in and out-of-band using the MasterSwitch Plus (AP9255 or AP9225EXP).

Accessories Increase Availability

By adding APC accessory cards into the built-in SmartSlot™, you can monitor power conditions and take action. The addition of the accessory cards increases overall system availability by proactively notifying you of conditions that could affect uptime. (Accessories sold separately and detailed on p. 11)

Redundant Power Cord Support

Using the APC Network Management Card with PowerChute Network Shutdown, multiple Smart-UPS units can coordinate shutdown of redundant power corded servers, thus providing a highly available 2N UPS solution.

ProtectNet™ increases availability

ProtectNet increases the availability of your systems by protecting your wiring and cabling from "back-door" surges and spikes, which cause system downtime and equipment damage. (For more information, visit www.apc.com/products/protectnet)

ProtectNet features a unique Double-Up Supplemental Equipment Policy

Under this unique policy, the total recovery limit of a Smart-UPS product's Lifetime Equipment Protection Policy is doubled. APC will then repair or replace properly connected and protected equipment, in the event that it is damaged by a lightning strike or surge, for up to \$300,000. (US and Canada only). For program details please refer to www.apc.com.



Manageability: Customized Control and Status

Informative LED Display provides status at a glance

Instantly assess the status of your power and APC Smart-UPS without even pushing a button. Bar meters and status indicators are simple to use and easy to understand. Visible and audible alarms alert you of fault conditions.

Load, Power and Volt Meters keep you in control

The Load Meter* reports the amount of power being drawn, preventing you from exceeding UPS capacity. The Volt Meter* reports utility line voltage and battery capacity, allowing you to gauge how much time you have before batteries are depleted. An alarm sounds when batteries are low, allowing you time to save data and shut down the system.

Alarms

Audible alarms alert you of changes in operating environment and battery conditions. Some alarms are software configurable. Most can also be suppressed or delayed, to eliminate unwanted noise.

USB Compatible

The new Smart-UPS (SUA Models) are compatible with the native Windows 2000/XP, and Windows Server 2003 USB and serial Power Options out-of-the-box. For advanced level manageability, full PowerChute Business Edition should be installed. As a charter member of the USB Implementers Forum and Microsoft partner, APC has played a significant role in defining USB specifications for power devices.



a Load Display*- Shows the power being drawn by the load and prevents you from exceeding capacity.

b AVR Trim LED*- LED lights up when the UPS is correcting a high utility voltage condition.

c On-line LED- LED lights up when the UPS is supplying utility power to the loads.

d AVR Boost LED*- LED lights up when the UPS is correcting a low utility voltage condition.

e On/Test Button- Turns on the UPS and activates the UPS self-test and utility line voltage displays.

f Off Button- Turns off the UPS and the load. Specifically designed to prevent accidental shutdowns.

g Overload LED- LED lights up and alarm sounds when the load connected to the UPS exceeds capacity.

h On-Battery LED- LED lights up and alarm sounds when the UPS is supplying battery power to the load.

i Replace Battery LED- LED lights up and alarm sounds when the UPS battery is nearly dead and must be replaced (typically within 30 days).

j Battery Charge/Line Voltage Display*- Displays both present battery charge as a percentage of battery capacity and utility line voltage. Alarm sounds upon low battery condition.

PowerChute Business Edition power management software included

PowerChute Business Edition is a department level management software which enables IT administrators to provide safe system shutdown and UPS management for servers and workstations. PCBE meets the demands of high performance networks and enhances the reliability and manageability of network and web servers.

- **Browser Manageable**

The Smart-UPS is easily manageable through standard browsers on local computers, networked computers or remote systems. (Requires PowerChute Web Device Manager running on a Windows NT/2000 web server on your network. See www.apc.com for a free download).

- **E-mail and Pager Alerts**

APC Smart-UPS e-mails and/or pages you via PowerChute Business Edition, alerting you of power problems and allowing you to respond, in order to maximize uptime.

- **Integrates with Server and Enterprise Management**

All Smart-UPS are shipped with support for Dell Network/Node Manager, Compaq Insight Manager (Windows NT/2000 and Novell NetWare), HP TopTools and IBM NetFinity. Plug-ins for HP Openview, CA Unicenter and Tivoli Netview are available separately.

Built-in SmartSlot provides the customizable performance you need

APC Smart-UPS are equipped with a built-in SmartSlot*, allowing you to employ various UPS Accessory cards to customize and enhance the management of your APC Smart-UPS. APC's series of UPS accessories plug directly into the back of your UPS. When an APC accessory is installed in your UPS, it becomes an integral part of the unit, drawing power from the UPS even when the UPS is in "sleep mode." Optional accessories allow you to remotely reboot individual devices, monitor ambient temperature and humidity and work with Emergency Power-Off (EPO) systems. (Accessories detailed on page 11)

*Feature not available on SU420NET/SU620NET models

Smart-UPS® Tower Series

Superior design, high-volume manufacturing and continuous quality enhancement give the APC Smart-UPS® line unsurpassed reliability. Award-winning APC Smart-UPS® towers are an ideal UPS for protecting business-critical file servers (Intel or UNIX based), minicomputers, network switches and hubs, point of sale, retail/bank back office and ATMs.



New! New!

Specifications for Smart-UPS Model: Part #	420 SU420NET	620 SU620NET	700 SU700NET	1000 SUA1000	1500 SUA1500	2200 SU2200NET	3000 SU3000NET	5000 SU5000TXFMR		
Ships with PowerChute software	Support for Windows NT/2000/XP, Windows Server 2003, Novell NetWare, SCO UnixWare, Solaris and Linux. Additional management platform integration plug-ins and application shutdown utilities available for download at www.apc.com/tools/download/ .									
Input Line, 6 ft. line cord	NEMA 5-15P					NEMA 5-20P	NEMA L5-30P	NEMA L6-30P		
Output Receptacles	4 NEMA 5-15R			8 NEMA 5-15R				2 NEMA L6-20R 14 NEMA 5-15R		
Communication Ports	Serial			Serial & USB		Serial				
Number of SmartSlot bays	n/a			1				2, ind. mgmt. card		
Maximum Dimensions (H x W x D)(in.)	6.6x4.7x14.5		6.2x5.4x14.1	8.5x6.7x17.3		17 x 7.7 x 21.5		20.8x17.5x26.2		
Net Weight (lbs.)	22	27	29	42	53	112	123	325		
Shipping Weight (lbs.)	24	29	32	46	58	134	142	360		
Replacement Battery Cartridge	RBC 2	RBC 4	RBC 5	RBC 6	RBC 7	RBC 11	RBC 11	Two RBC 12		
Service Level	SB-11			SB-12		SB-13		SB-14		
OPERATION	SU420NET	SU620NET	SU700NET	SUA1000	SUA1500	SU2200NET	SU3000NET	SU5000TXFMR		
Nominal Input Voltage	120 Vac, single phase, 50 or 60 Hz (auto-selectable)									
Transfer Time (typical)	2 milliseconds, includes detection time									
AVR Boost/AVR Trim	30% / 12%		12% / 12%		30% / 12%		12% / 12%			
Default Input Voltage ²	82-144 VAC		92-147 VAC		82-144 VAC		157-255 VAC			
Max input voltage range (adjustable for mains without battery discharge)	75-154 VAC		86-154 VAC		75-154 VAC		151-268 VAC			
Output Voltage Range	106-127 VAC		103-132 VAC		106-127 VAC		120-208 VAC			
Capacity (Volt-Amps, Watts)	420, 260	620, 390	700, 450	1000, 670	1500, 980	2200, 1980	3000, 2700	4500, 3375		
Surge energy rating, peak current capability	412 Joules, 6.5kA		480 Joules, 6.5kA		459 Joules, 6.5kA		880 Joules, 6.5kA			
Normal, common mode clamping response time	0 ns, <5ns typical									
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.7% of peak typical				<0.3% of peak typical					
Batteries	Maintenance-free sealed Lead-Acid battery with 3-6 year typical lifetime: leakproof									
Recharge time to 90% capacity	5 hours			3 hours			6 hours			
Ambient Operation	3,000 m max elevation, 0-95% humidity, non-condensing, 32-104 degF									
Storage Conditions	15, 000 m max elevation, 5-113 deg F									
Audible noise at 3.3 ft. (1 m)	<45 dBA		<41 dBA		<45 dBA		<53 dBA	< 47 dBA		
Thermal Dissipation (BTU/Hr)	50	70	85	100	135	275	375	1708		
TYPICAL RUNTIME IN MINUTES										
LOAD	Watts⁴	(VA)	SU420NET	SU620NET	SU700NET	SUA1000	SUA1500	SU2200NET	SU3000NET³	SU5000TXFMR
100	140		21min	45min	60hr	100min	172min	336min	336min	471min
300	420		n/a	7min	11min	25min	51min	122min	122min	322min
600	840		n/a	n/a	n/a	7min	17min	52min	52min	98min
900	1260		n/a	n/a	n/a	n/a	8min	28min	28min	59min
1400	1960		n/a	n/a	n/a	n/a	n/a	13min	13min	31min
2000	2080		n/a	n/a	n/a	n/a	n/a	n/a	7min	17min

¹ SU420 and SU620 also offer built-in data-line protection for RJ-11 and 10BaseT ethernet protection.

² Transfer points are user-adjustable using included software.

³ Additional battery pack (SU48BP) available for extra runtime.

⁴ Servers and other IT equipment are moving to Power Factor Corrected (PFC) power supplies of 1.0, where the power drawn in Volt-Amps (VA) is equal to Watts(W). For accurate sizing, use the watt rating of the equipment to determine the correct UPS and runtime. If the watt rating is unavailable use the Amp (A) rating and multiply by the voltage to obtain VA. For the most recent sizing information, please consult the Size-UPS section of APC's website at www.apc.com/sizing.

Smart-UPS® Rack-mount Series

Available in a broad range of sizes, Smart-UPS rack-mounts are easy to install and compatible with all popular rack systems. They offer an ideal solution for rack-optimized servers, server appliances, blade servers and other rack mounted network switches, hubs and gateways.



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Specifications for Smart-UPS Model: Part #:	750 SUA750RM1U	1000 SUA1000RM1U	750 SUA750RM2U	1000 SUA1000RM2U	1500 SUA1500RM2U	2200 SUA2200RM2U	3000 SUA3000RM2U	3000 SU3000RMNET	5000 SU5000RMT5UXFMR	
Ships with PowerChute software	Support for Windows NT/2000/XP, Windows Server 2003, Novell NetWare, SCO UnixWare, Solaris and Linux. Additional management platform integration plug-ins and application shutdown utilities available for download at www.apc.com/tools/download/ .									
Input Line, 8 ft. line cord	NEMA 5-15P			NEMA 5-20P			NEMA L5-30P		NEMA L6-30P	
Output Receptacles	4 NEMA 5-15R		6 NEMA 5-15R			6 NEMA 5-15R, 2 NEMA 5-20R		8 NEMA 5-15R	2 NEMA L6-20R 2 NEMA 5-15R 12 NEMA2-50R	
Communication Ports	Serial & USB							Serial		
Number of SmartSlot bays	1 Smart Slot Bay Included								2, ind. mgmt. card	
Maximum Dimensions (H x W x D) (in.)	1.75x17x26		3.5x19x18			3.5x19x26		8.8x19x7.8	12.3x19x25	
Net Weight (lbs.)	48		48		62	63	96	196	320	
Shipping Weight (lbs.)	56		55.3		69	70.2	125	145	355	
Replacement Battery Cartridge	RBC 34		RBC 22		RBC 23	RBC 24	RBC 43	RBC 11	Two RBC 12	
Service Level	SBC 12							SBC 13	SBC 14	
OPERATION	SUA750RM1U	SUA1000RM1U	SUA750RM2U	SUA1000RM2U	SUA1500RM2U	SUA2200RM2U	SUA3000RM2U	SU3000RMNET	SU5000RMT5UXFMR	
Nominal Input Voltage	120 Vac, single phase, 50 or 60 Hz (auto-selectable)								208 Vac, 50-60 Hz.	
Transfer Time (typical)	2 milliseconds, includes detection time									
AVR Boost/AVR Trim	30% / 12%							12% / 12%		
Default Input Voltage Range	82-144 VAC							92-147 VAC	157-253 VAC	
Max input voltage range (adjustable for mains without battery discharge)	75-154 VAC							86-154 VAC	151-268 VAC	
Capacity (Volt-Amps, Watts)	750, 480	1000, 640	750, 480	1000, 670	1500, 980	2200, 1980	3000, 2700	3000, 2250	4500, 3375	
Output Voltage Range	106-127 VAC							103-132 VAC	120, 208 VAC	
Surge energy rating, peak current	480 Joules, 6.5 kA		459 Joules, 6.5 kA			480 Joules, 6.5 kA		880 Joules, 6.5kA	1020 Joules, 6.5 kA	
Normal, common mode clamping response time	0 ns, <5ns typical									
Normal mode surge voltage let through (IEEE587 Cat A 6kV test)	<0.3% of peak typical									
Batteries	Maintenance-free sealed Lead-Acid battery with 3-6 year typical lifetime: leakproof									
Recharge time to 90% capacity	2 hours			3 hours				6 hours		
Ambient Operation	3,000 m max elevation, 0-95% humidity, non-condensing, 32-104 degF									
Storage Conditions	15, 000 m max elevation, 5-113 deg F									
Audible noise at 3.3 ft (1 m)	<45 dBA		<36 dBA		<46 dBA	<47 dBA		<53 dBA		
Thermal Dissipation (BTUs/Hr)	130		68	89	171	300	400	430		
TYPICAL RUNTIME IN MINUTES										
LOAD Watts ²	VA	SUA750RM1U	SUA1000RM1U	SUA750RM2U	SUA1000RM2U	SUA1500RM2U	SUA2200RM2U	SUA3000RM2U	SU3000RMNET	SU5000RMT5UXFMR
300	420	16min	16min	11min	35min	55min	64min	70min	122min	202min
600	840	-	6min	-	11min	30min	19min	33min	52min	98min
900	1260	-	-	-	-	18min	9min	20min	28min	59min
1400	1960	-	-	-	-	10min	-	11min	13min	131min
2000	2800	-	-	-	-	-	-	6min	7min	17min
3000	4200	-	-	-	-	-	-	-	-	8min

¹ Transfer points are user-adjustable using included software.

² Servers and other IT equipment are moving to Power Factor Corrected (PFC) power supplies of 1.0, where the power drawn in Volt-Amps (VA) is equal to Watts(W). For accurate sizing, use the watt rating of the equipment to determine the correct UPS and runtime. If the watt rating is unavailable use the Amp (A) rating and multiply by the voltage to obtain VA. For the most recent sizing information, please consult the Size-UPS section of APC's website at www.apc.com/sizing.

Smart-UPS® 208V Series

APC Smart-UPS 208V models support high-powered servers, networking equipment and telecom equipment. Many of today's IT manufacturers are requiring 208V because it uses less current and requires smaller wiring circuit protection. Additionally, it delivers greater power than 120V systems. Telecom equipment has traditionally used 208V and continues to broaden its base in this power range.



New!

New!

Specifications for Smart-UPS Model: Part#:	Tower Units			Rack-mount Units				
	2000 SU2200XLTNET	3000 SU3000TNET	5000 SU5000T	22000 SU2200RMXLTNET	3000 SUA3000RMT2U	5000 SU5000RMT5U	5000 SU5000RMXLT5U	
Ships with PowerChute software	Support for Windows NT/2000/XP, Windows Server 2003, Novell NetWare, SCO UnixWare, Solaris and Linux. Additional management platform integration plug-ins and application shutdown utilities available for download at www.apc.com/tools/download/ .							
Input Line Cord	NEMA L6-20P		NEMA L6-30P	NEMA L6-20P		NEMA L6-30P	NEMA L6-30P	
Input Cord Length	6 foot			8 foot			10 foot	
Output receptacles (5-15R receptacles provide up to 400VA of 120V power ¹)	2 NEMA L6-30R 1 NEMA L6-20R 2 NEMA 5-15R		1 NEMA L6-30R 2 NEMA L6-20R 2 NEMA 5-15R	2 NEMA L6-30R 1 NEMA L6-20R 2 NEMA 5-15R	1 NEMA L6-20R 1 NEMA L6-30R	1 NEMA L6-30R 2 NEMA L6-20R 2 NEMA 5-15R	2 NEMA L6-20R 1 NEMA L6-30R	
Communication Ports	Serial			Serial & USB		Serial		
Number of SmartSlot Bays	1	1	2	1	1	2, inc. mgt card	1, inc. mgmt card	
Maximum Dimensions (inches)	17 x 7.7 x 21.5		17.3 x 9 x 26.2	8.8 x 19 x 17.8	3.5x19x26	8.8 x 19 x 25	8.75x19x25	
Net Weight (lbs)	137	137	230	132	96	225	225	
Shipping Weight (lbs)	167	156	250	151	125	245	245	
Replacement Battery Cartridge	RBC 11		Two RBC 12	RBC 11	RBC 43	Two RBC 12	Two RBC 12	
Pricing Level for Service Options	SB-13	SB-14		SB-13	SB-12	SB-14		
OPERATION	SU2200XLTNET	SU3000TNET	SU5000T	SU2200RMXLTNET	SUA3000RMT2U	SU5000RMT5U	SU5000RMXLT5U	
Nominal Input Voltage	208 Vac, single phase, 50 or 60 Hz (auto-selectable)							
Transfer Time (typical)	2 milliseconds, includes detection time							
AVR Boost/AVR Trim	12% / 12%				30%/12%	12%/12%		
Default Input Voltage ²	157-255 VAC				141-255 VAC	157-255 VAC		
Max input voltage adjustable range for mains without battery discharge	151-268 VAC				131-268 VAC	151-268 VAC		
Output Voltage Range	178-230 VAC				185-225 VAC	178-230 VAC		
Capacity (Volt-Amps, Watts)	750, 600	1000, 800	2200, 1600	1400, 1050	3000, 2700	2200, 1750		
Surge energy rating, peak current capability	960 Joules 6.5 kA		1020 Joules, 6.5kA	960 Joules 6.5 kA	480 Joules 6.5 kA	1020 Joules 6.5 kA		
Normal, common mode clamping response time	0 ns, <5ns typical							
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.3% of peak typical							
Batteries	Maintenance-free sealed Lead-Acid battery with 3-6 year typical lifetime: leakproof							
Recharge time to 90% capacity	3 hours							
Ambient Operation	3,000 m max elevation, 0-95% humidity, non-condensing, 32-104 degF							
Storage Conditions	15, 000 m max elevation, 5-113 deg F							
Audible noise at 3.3 feet (1 m)	<53 dBA							
Thermal Dissipation (BTUs/Hr)	275	375	430	305	400	430		
Load Watts³	VA	SU2200XLTNET	SU3000TNET	SU5000T	SU2200RMXLTNET	SUA3000RMT2U	SU5000RMT5U	SU5000RMXLT5U
800	1120	34min	34min	69min	34min	23min	69min	69min
1400	1960	13min	13min	31min	13min	11min	31min	31min
2000	2800	n/a	7min	17min	n/a	6min	17min	17min
3000	4200	n/a	n/a	8min	n/a	n/a	8min	8min
Uses Additional Battery Pack(s)		SU48XLBP or UXBP48	SU48BP	n/a	SU48RMXLBP or UXBP48	n/a	n/a	SU48R3XLBP

For extended runtimes refer to the table on page 10.

¹ All "T" models provide 400VA of 120V power. The 120 VAC output is a fixed ratio from the 208 VAC output.

² Transfer points are user-adjustable using included software.

³ Servers and other IT equipment are moving to Power Factor Corrected (PFC) power supplies of 1.0, where the power drawn in Volt-Amps (VA) is equal to Watts(W). For accurate sizing, use the watt rating of the equipment to determine the correct UPS and runtime. If the watt rating is unavailable use the Amp (A) rating and multiply by the voltage to obtain VA. For the most recent sizing information, please consult the Size-UPS section of APC's website at www.apc.com/sizing.

Smart-UPS® XL Series

Available in tower and rack-optimized form factors. APC's Smart-UPS XL is ideal for mission-critical applications where long term runtimes are essential. Voice-over-IP (VoIP) gateways, telephone PBXs, critical application servers and data communications links will benefit from the added availability of the XL models with additional battery packs.

Smart-UPS Availability

- Achieving 99.999% uptime requires a UPS with a runtime of greater than one hour, or a generator.
- Up time levels can be dramatically enhanced by increasing the run time of your UPS from five minutes to one hour.

	Tower Units			Rack-mount Units					
Specifications for Smart-UPS model: Part #:	750 SUA750XL	1000 SUA1000XL	2200 SU2200XLNET	1400 SU1400RMXL3U	2200 SU2200RMXLNET	2200 SU2200RMXL3U	3000 SU3000RMXL3U	5000 SU5000RMXL5U	
Ships with PowerChute software	Support for Windows NT/2000/XP, Windows Server 2003, Novell NetWare, SCO UnixWare, Solaris and Linux. Additional management platform integration plug-ins and application shutdown utilities available for download at www.apc.com/tools/download/ .								
Input Line Cord	NEMA 5-15R		NEMA L5-30P	NEMA 5-15P	NEMA L5-30P			NEMA L6-30P	
Input Cord Length	6 foot			8 foot			10 foot		
Output receptacles (IEC320)	8 NEMA 5-15R			6 NEMA 5-15R	8 NEMA 5-15R	8 NEMA 5-20R		2 NEMA L6-20R, 1 NEMA L6-30R	
Communication Ports	Serial & USB			Serial					
Number of SmartSlot bays	1 SmartSlot bay included							1, Incl. Mgmt. Card	
Maximum Dimensions (H x W x D) (in)	8.5x6.7x17.3		17x7.7.21.5	5.25x19x15.5	8.8x19x17.8	5.25x19x26		8.75x19x25	
Net Weight (lb)	53		121	70	124	124		225	
Shipping Weight (lb)	58		140	82	143	139		245	
Replacement Battery Cartridge	RBC7		RBC11	RBC25	RBC11	RBC27		(2) RBC12	
Service Level	SB12		SB13	SB12	SB12	SB13		SB14	
OPERATION	SUA750XL	SUA1000XL	SU2200XLNET	SU1400RMXL3U	SU2200RMXLNET	SU2200RMXL3U	SU3000RMXL3U	SU5000RMXL5U	
Nominal Input Voltage	120 Vac, single phase, 50 or 60 Hz (auto-selectable)								
Transfer Time (typical)	2 milliseconds, includes detection time								
AVR Boost/AVR Trim	30%/12%			12% / 12%					
Default Input Voltage ¹	82-144 VAC			92-147 VAC				157-255 VAC	
Max input voltage (adjustable range for mains without battery discharge)	75-154 VAC			86-154VAC				151-268 VAC	
Output Voltage Range	106-127 VAC			103-132 VAC				178-230 VAC	
Capacity (Volt-Amps, Watts)	750, 600	1000, 800	2200, 1600	1400, 1050	2200, 1600	2200, 1750	3000, 2400	5000, 4000	
Surge energy rating, peak current capability	420 Joules, 6.5 kA		480 Joules, 6.5kA	800 Joules, 6.5kA	880 Joules, 6.5kA			1020 Joules, 6.5kA	
Normal, common mode clamping response time	0ns, <5ns typical								
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.3 % of peak, typical								
Batteries	Maintenance-free sealed Lead-Acid battery with 3-6 year typical lifetime: leakproof								
Recharge time to 90%	3 Hours								
Ambient Operation	3,000 m max elevation, 0-95% humidity, non-condensing, 32-104 degF								
Storage Conditions	15, 000 m max elevation, 5-113 deg F								
Audible noise at 3.3 ft (1 m)	<42dBA		< 53 dBA	<46 dBA	< 53dBA				
Thermal Dissipation (BTUs/Hr)	100	120	305	155	275	375	375	430	
TYPICAL RUNTIME IN MINUTES									
Load Watts ²	VA	SUA750XL	SUA1000XL	SU2200XLNET	SU1400RMXL3U	SU2200RMXLNET	SU2200RMXL3U	SU3000RMXL3U	SU5000RMXL5U
300	420	51	51	122	55	122	127	127	382
800	840	17	17	52	19	52	56	56	98
600	1120	n/a	10	34	11	34	37	37	69
1400	1960	n/a	n/a	13	n/a	13	14	14	31
2000	2800	n/a	n/a	n/a	n/a	n/a	n/a	7	17
3000	4200	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8
Uses Additional Battery Pack(s)	SUA24XLBP	SUA24XLBP	SU48XLBP	SU24RMXLBP2U	SU48RMXLBP	SU48R3XLBP	SU48R3XLBP	SU48R3XLBP	SU48R3XLBP
Ultra Extended Runtime Battery Pack	UXBP24	UXBP24	UXBP48	n/a	UXBP48	n/a	n/a	n/a	n/a
For extended runtimes refer to the table on page 10.									

¹ Transfer points are user-adjustable using included software.

² Servers and other IT equipment are moving to Power Factor Corrected (PFC) power supplies of 1.0, where the power drawn in Volt-Amps (VA) is equal to Watts(W). For accurate sizing, use the watt rating of the equipment to determine the correct UPS and runtime. If the watt rating is unavailable use the Amp (A) rating and multiply by the voltage to obtain VA. For the most recent sizing information, please consult the Size-UPS section of APC's website at www.apc.com/sizing.

Smart-UPS® XL and UX Battery Packs

Long battery life

By packaging the batteries in an enclosure separate from the UPS electronics, the batteries operate at reduced temperatures. Battery life is further enhanced through CellGuard intelligent battery management with high precision FastCharge™, and automatic true-load battery tests.

APC Smart-UPS XL increases your availability with N+1 batteries

Extended battery packs running in parallel with internal batteries provide extended runtime and redundancy, if a battery should fail. Smart-

UPS XL battery packs are hot-swappable so you never have to take down your mission-critical loads to service the unit.

Simple maintenance

A battery change usually requires trained service personnel or the expense of hiring an electrician. This is not the case with APC's Smart-UPS XL. The modular Smart-UPS XL allows the user to easily replace battery packs in minutes, while the protected equipment remains up and running.

SPECIFICATION	Battery Packs				
	SUA24XLBP/SU48XLBP/SU48BP	SU24RMXLBP2U	SU48RMXLBP	SU48R3XLBP	UXBP24/UXBP48
Maximum Dimensions (H x W x D)	8.5 x 6.7 x 17.3"	3.37 x 17 x 19"	7 x 19 x 17.8"	5.25 x 19 x 26"	12.2 x 17.6 x 29.7"
Net Weight (lbs.)	69 lb.	67 lb.	136 lb.	140 lb.	280 lb.
Shipping Weight (lbs.)	73 lb.	80 lb.	153 lb.	155 lb.	314 lb.
Replacement Battery Cartridge	RBC11	(2) RBC 26	(2) RBC11	(2) RBC 27	RBC13
Pricing Level for Service Options	SB-11	SB-12	SB-12	SB-12	SB-12

APC Smart-UPS with UX battery packs provide ultra-extended runtime for maximum uptime



APC Smart-UPS® 750XL and 1000XL

Extended Run Tower Models

Note: Runtimes are expressed in hours and are a function of the total load in watts. The actual VA may be determined by using the appropriate power factor of the attached load. The SUA750XL and SUA1000XL can accept an unlimited number of external battery packs. For the most accurate and comprehensive sizing information consult the Size-UPS section of APC's website at www.apc.com.

SUA750XL/SUA1000XL with:	1 SUA24XLBP	2 SUA24XLBP	3 SUA24XLBP	1 UXBP24	2 UXBP24
200W	5.3	9.2	13.0	17.4	35.4
400W	2.5	4.6	6.7	9.0	18.7
600W	1.5	3.0	4.4	6.0	12.6
800W ¹	1.0	2.1	3.2	4.4	9.4
¹ Does not apply to SUA750XL.					
SU2200XLNET, SU2200XLNET with:	1 SU48XLBP	2 SU48XLBP	3 SU48XLBP	1 UXBP48	2 UXBP48
600W	2.2	3.6	5.0	6.5	12.2
800W	1.5	2.6	3.6	4.8	9.2
1400W	0.7	1.3	1.9	2.6	5.1



Extended Run Rack-mount Models

Note: Runtimes are expressed in hours and are a function of the total load in watts. The actual VA may be determined by using the appropriate power factor of the attached load. The UXBP48 is not rack mountable. For the most accurate and comprehensive sizing information consult the Size-UPS section of APC's website at www.apc.com.

SU1400RMXL3U with:	1 SU24RMXLBP2U	2 SU24RMXLBP2U	3 SU24RMXLBP2U	8 SU24RMXLBP2U	10 SU24RMXLBP2U
300W	2.5	5.0	7.2	18.4	22.8
500W	1.5	2.9	4.3	11.2	14.0
800W	0.8	1.6	2.5	7.0	8.7
1000W	0.5	1.2	2.0	5.5	7.0
SU2200RMXL3U, SU3000RMXL3U, (SU5000RMXL3U, SU5000R5LTXFMR) with:	1 SU48R3XLBP	2 SU48R3XLBP	3 SU48R3XLBP	8 SU48R3XLBP	10 SU48R3XLBP
800W	2.0 (2.8)	3.8 (4.4)	5.5 (6.1)	14.0 (14.5)	17.5 (18.0)
1400W	1.0 (1.5)	2.0 (2.5)	3.0 (3.5)	8.0 (8.5)	10.0 (10.5)
2000W ¹	0.5 (0.9)	1.3 (1.6)	2.0 (2.3)	5.5 (5.8)	7.0 (7.3)
3000W ²	(0.5)	(1.0)	(1.4)	(3.8)	(4.7)

¹ Does not apply to SU2200RMXL3U

² Does not apply to SU2200RMXL3U or SU3000RMXL3U

Management Peripherals for Smart-UPS

PowerChute Business Edition

Department-level management software, enabling IT administrators to provide safe system shutdown and UPS management for servers and workstations.

- Centrally manage up to 25 UPSs simultaneously over a network
- Recommended Actions speed troubleshooting
- Mass configuration makes UPS configuration fast and easy
- Power Analysis alerts users to unusual power situations



APC Network Management Card with PowerChute Network Shutdown

Provides network interface and standards based management for APC UPSs.

- 10/100 BaseT card with upgradeable memory
- Configure and control the UPS securely via Web, Telnet, and SNMP
- Scheduling, Data, and Event logs provide advanced tools to control and diagnose UPS events
- Configurable event handling and e-mail notification
- Multi-UPS coordination for dual-corded servers



InfraStruXure™ Manager

Server appliance designed to manage a zone of InfraStruXure™ devices.

- Single IP address provides access to multiple InfraStruXure™ devices
- User configurable actions allow immediate notification of critical power and environmental events
- Provides remote management capabilities
- Provides historical data for each device, such as voltages, load, and temperature



UPS Management Peripherals

Relay I/O Card

UPS card for network administrators to control and monitor power through a dry-contact interface in rack, computer room, and data center environments.



Out-of-Band Management Card

UPS card for network administrators to manage UPSs remotely via modem throughout the network.



2-Port/8-Port Interface Expander

UPS card/peripheral for network administrators that provides safe system shutdown for multiple operating systems in rack, computer room, and data center environments.



PowerView

Hand-held control panel for network administrators that configures and controls UPSs in rack, computer room, and data center environments.



MasterSwitch Plus

Remotely control power to individual outlets and monitor the aggregate power consumption via local and remote displays.



Remote Power Off

Immediately turn off APC UPS output via remote switch. It may also be used with an EPO to remotely control power during emergencies.



Environmental Management

Environmental Monitoring Card

UPS enhancement card enabling monitoring of basic environmental conditions

- Temperature and humidity monitoring
- Four user-definable contact closure inputs for use with water, smoke, physical security, or other sensors



Environmental Monitoring Unit

Network manageable device enabling monitoring of basic environmental conditions

- Temperature and humidity monitoring
- Four user-definable contact closure inputs for use with water, smoke, physical security, or other sensors



Environmental Management System

Network manageable device enabling comprehensive environmental management

- Temperature and humidity monitoring
- 9 user definable contact closure inputs
- Water, smoke, motion, physical security, and vibration sensors available
- Alarm beacon capable
- 2 controllable power outlets
- 8 port 10/100 Ethernet switch

