UPS Series

uninterruptible power supply

uninterruptible power supply with energy saver design that is optimized to address the needs of A/V systems

features:

- Pure Sine Wave technology with Automatic Voltage Regulation to improve the quality of power provided to the A/V system
- Surge suppression utilizes a clean line-to-neutral design that does not pass noise contamination to ground
- Models with bank control available
- Individual outlet control available
- Internet enabled models available, which include:
  - Real time UPS monitoring via the Web
  - Remote management and configuration of UPS via Web Browser or NMS (Network Management System)
  - Auto-shutdown to protect servers/workstations from data loss due to power failure
  - Schedule shutdown/start-up/reboot of the UPS
  - Event logging to trace UPS operational history
  - Data logging for analyzing power conditions
  - Event notification via email and SNMP traps
  - Supports TCP/IP, SNMP/HTTP, NTP, DNS, SMTP protocol
  - MIB (Management Information Base) provided
  - Quick installation and user friendly interface
  - User upgradeable firmware via FTP
  - Security management provided
- Control system integration via RS-232 and USB and analog I/O
- Load shedding allows extended run time for system-critical components by disconnecting power to less-critical components
- Line Interactive Technology
- Power Manager software allows extensive configuration and event notification capabilities
- Energy Saver design reduces power consumption by up to 75% when compared with traditional UPS designs
- 9' SignalSAFE™ power cord minimizes stray magnetic fields
- UL Listed in the US and Canada

UPS-1000R

UPS-EBPR

UPS Series
basic dimensions

specifications:

Rackmount Uninterruptible Power Supply (UPS) shall be Middle Atlantic Products model # UPS- __ R__ (refer to chart). UPS shall be line interactive with AVR. Unit shall measure 19.00" W x 3.50" H x 19.00" D and occupy 2 rackspaces. UPS shall have a rear mounting range of 19" to 32" and not require more than one person to mount. Unit shall operate on 120 VAC/60Hz current. Unit shall have a nominal output of 120V. Unit shall have a capacity of __ VA and __ W (refer to chart). Unit shall have (8) NEMA 5- __ receptacles on the rear of the unit (refer to chart). Unit shall have a priority outlet bank consisting of 4 outlets dedicated to ensure maximum run time of critical components. Unit shall have a non-critical outlet bank consisting of 4 outlets dedicated to load shedding, or individual outlet control, depending on model. Unit shall be IP enabled, depending on model, or when used with option IP Expansion card, model# UPS-IPCARD. Rackmount UPS shall include a 9' __ (refer to chart) SignalSAFE™ power cord with NEMA __ (refer to chart) plug. UPS shall have surge suppression that utilizes a clean line-to-neutral design that does not pass noise contamination to ground. Rackmount UPS shall have a hot swappable battery that allows for a __ minute run time at half load and a __ (refer to chart) minute run time at full load. Rear of unit shall have inputs that allow for the installation of up to 10 additional hot swappable batteries. Rackmount UPS shall be RoHS EU Directive 2002/95/EC compliant. Rackmount UPS shall utilize Middle Atlantic Power Manager™ software. Rackmount UPS shall be warrantied to be free from defects in materials and workmanship under normal use and conditions for a period of 3 years; battery shall be warrantied for a period of 2 years. Rackmount UPS shall be UL listed in US and Canada.

UPS-1000 Series					
Utility Voltage (AC)	≤ 80	81-105	106-133	133-147	>147
Fans Engaged	front & rear	rear only	none	rear only	front & rear
dBA above Ambient	22dBA	11dBA	0	11dBA	22dBA

UPS-2200 Series					
Utility Voltage (AC)	≤ 80	81-105	106-133	133-147	>147
Fans Engaged	Front & Rear	Rear only	None	Rear Only	Front & Rear
dBA above Ambient	27dBA	14dBA	0	14dBA	27dBA

UPS-IPCARD
Web based control shall be enabled on non-internet enabled Middle Atlantic Products UPS by UPS-IPCARD, which shall be installed into the Expansion Port on the rear of the UPS. This shall be compatible with UPS firmware v1.65 or greater, and provide full functionality when used on models with firmware v1.75 or greater.

UPS-RLCARD
Remote shutdown of the UPS shall be enabled on non-internet enabled Middle Atlantic Products UPS by UPS-RLCARD, which shall be installed into the Expansion Port on the rear panel of the UPS. This shall be compatible with UPS firmware v1.65 or greater. A user supplied remote push button and external +12VDC source shall be connected to the DB-9 connector on the UPS-RLCARD to activate the remote shutdown feature.

Expansion Battery
Rackmount expansion battery pack shall be Middle Atlantic Products model# UPS-EBPR. Expansion battery pack shall be suitable for use with both UPS-1000R and UPS-2200R. UPS-EBPR shall measure 19.00" W x 3.50" H x 19.29" D and occupy 2 rackspaces. UPS-EBPR shall require 22.66" useable depth. With __ hot swappable batteries connected to the unit, there is a __ minute run time at half load and a __ minute run time at full load (refer to chart). Rackmount expansion battery pack shall be warrantied for a period of 2 years.

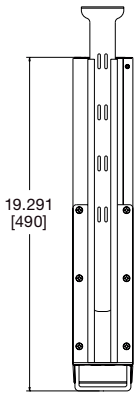
Replacement Battery
Replacement Battery Pack for the UPS shall be Middle Atlantic Products model # UPS-RBP. Replacement battery pack shall be suitable for use with both UPS-1000R__ and UPS-2200R__. Replacement battery shall be warrantied to be free from defects in materials and workmanship under normal use and conditions for a period of 2 years.

UPS Series
basic dimensions

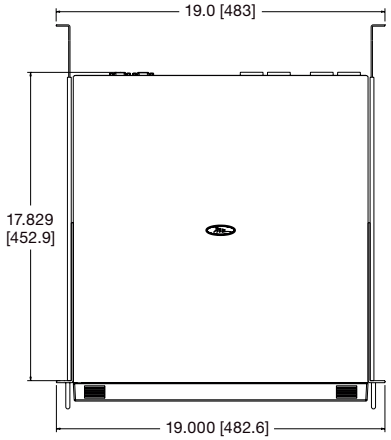
all dimensions in inches unless otherwise noted [all dimensions in brackets are in millimeters]

UPS-2200/1000 Series

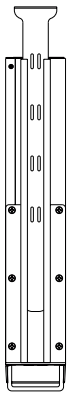
side view



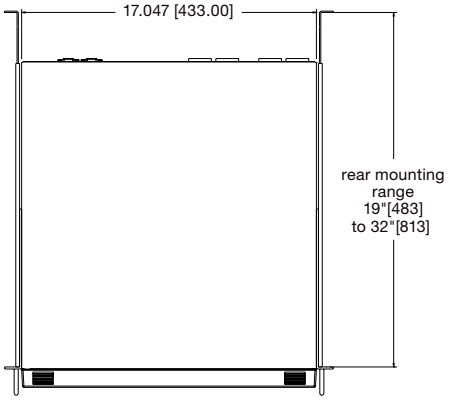
top view



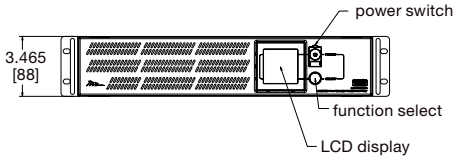
side view



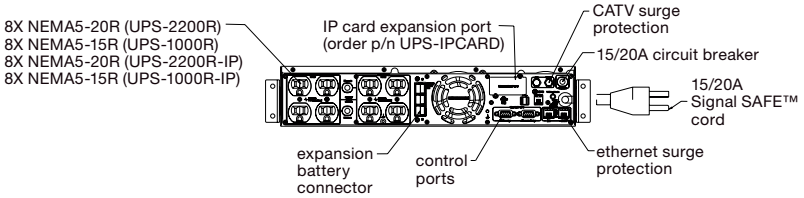
bottom view



front view

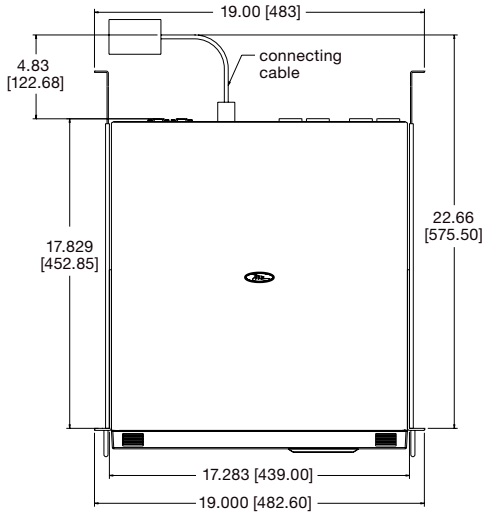


rear view

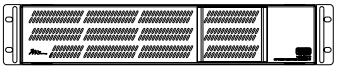


UPS-EBPR Series

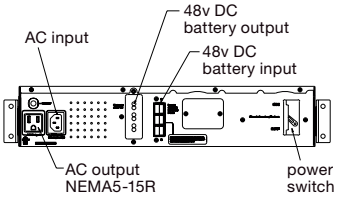
top view



front view



rear view



Model#	Capacity	Outlet Control	Internet enabled
UPS-1000R	1000VA	critical / non-critical bank	w/ optional UPS-IPCARD
UPS-1000R-IP	1000VA	critical / non-critical bank	yes
UPS-1000R-8	1000VA	individual outlet	w/ optional UPS-IPCARD
UPS-1000R-8IP	1000VA	individual outlet	yes
UPS-2200R	2150VA	critical / non-critical bank	w/ optional UPS-IPCARD
UPS-2200R-IP	2150VA	critical / non-critical bank	yes
UPS-2200R-8	2150VA	individual outlet	w/ optional UPS-IPCARD
UPS-2200R-8IP	2150VA	individual outlet	yes

UPS Series
basic dimensions

all dimensions in inches unless otherwise noted [all dimensions in brackets are in millimeters]

		UPS-1000R Series		UPS-2200R Series	
Input	Nominal Input Voltage	120 V		120 V	
	Input Voltage Range	80VAC – 145VAC		80VAC – 145VAC	
	Input Frequency	60 Hz +/- 3 Hz (auto sensing)		60 Hz +/- 3 Hz (auto sensing)	
	Input Protection Type	Resettable thermal fuse		Resettable thermal fuse	
	Cord Length / Cord Type / Plug Type	9 ft. / 14/3 / NEMA 5-15P		9 ft. / 12/3 / NEMA 5-20P	
Output	Green Mode Consumption	Less than 9W at full battery capacity		Less than 9W at full battery capacity	
	Nominal Output Voltage	120 V		120 V	
	Capacity (VA)	1000VA		2150VA	
	Capacity (Watts)	750W		1650W	
	Waveform	Pure Sine Wave		Pure Sine Wave	
	On Line Output Frequency	57 - 63 Hz for 60 Hz nominal		57 - 63 Hz for 60 Hz nominal	
	On Battery Output Frequency	60 Hz +/- .1 Hz		60 Hz +/- .1 Hz	
	Transfer Time (Typical)	4 ms typical line to battery / battery to line		4 ms typical line to battery / battery to line	
	Overload Protection (on line mode)	100%≤ Load< 110% warning, 120 sec shutdown 110%≤ Load< 125% warning, 40 sec shutdown 125%≤ Load warning, 10 sec shutdown		100%≤ Load< 110% warning, 120 sec shutdown 110%≤ Load< 125% warning, 40 sec shutdown 125%≤ Load warning, 10 sec shutdown	
	Overload Protection (on battery mode)	100%≤ Load< 110% warning, 30 sec shutdown 110%≤ Load< 125% warning, 10 sec shutdown 125%≤ Load warning, 3 sec shutdown		100%≤ Load< 110% warning, 30 sec shutdown 110%≤ Load< 125% warning, 10 sec shutdown 125%≤ Load warning, 3 sec shutdown	
Total Harmonic Distortion (THD) *typical 120V power with 2%-4% THD	Total System Load	0%	20%	60%	100%
	Utility Mains* THD	2.0%	2.0%	2.0%	2.0%
	Battery Backup THD	1.9%	1.3%	1.5%	5.2%
Surge Protection & Filtering	Lightning / Surge Protection	L-N=>381 J (127J x 3) Clamp voltage 270V (Max energy 10 / 1000 µs)		L-N=>381 J (127J x 3) Clamp voltage 270V (Max energy 10 / 1000 µs)	
	RJ11 / RJ45 Protection	Sidactorx1 Clamp Voltage 275V Fuse (.75A / 250V) x 2		Sidactorx1 Clamp Voltage 275V Fuse (.75A / 250V) x 2	
Physical	Output Receptacles	(8) NEMA 5-15R		(8) NEMA 5-20R	
	Dimensions (in.)	19.00" [423] W x 3.50" [89] H x 19.29" [490] D		19.00" [423] W x 3.50" [89] H x 19.29" [490] D	
	Weight (lb.)	68 lbs.		77 lbs.	
Battery	Rating	12V / 9.0 AH x 4		12V / 9.0 AH x 4	
	Auto Charger	1A		1A	
	Hot Swappable External Battery	Yes		Yes	
	Run Time at Half Load	26 minutes		13 minutes	
	Run Time at Full Load	13 minutes		6.4 minutes	
Warning Diagnostics	Control Panel	LCD Display Indicators, Power On		LCD Display Indicators, Power On	
	Audible Alarms	On Battery, Low Battery		On Battery, Low Battery	
Environmental	Operating Temperature	32°F to 104°F (0°C to 40°C)		32°F to 104°F (0°C to 40°C)	
	Operating Relative Humidity	0 to 95% Non-Condensing		0 to 95% Non-Condensing	

UPS Series
basic dimensions

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		UPS-1000R Series	UPS-2200R Series
Communication	Software	Middle Atlantic Power Manager™	Middle Atlantic Power Manager™
Management	Self-Test	Manual Self-Test via front panel	Manual Self-Test via front panel
	Auto-Charger/ Auto-Restart	yes	yes
	COM Interface	Primary: - RS232 Communication + Control - Analog Status Notification + Control Secondary: - Analog status notification only	Primary: - RS232 Communication + Control - Analog Status Notification + Control Secondary: - Analog status notification only
	Built-in USB Interface	yes	yes

Estimated Run Times UPS-1000R Series								
Load (VA)	120	240	360	480	600	720	840	960
Load (W)*	84	168	252	336	420	504	588	672
Load (A)	1	2	3	4	5	6	7	8
# of expansion batteries	Estimated Run Time (Minutes)							
UPS only	102	51	34	26	20	17	15	13
1	561	283	190	143	114	94	80	69
2	1020	515	345	260	207	171	145	125
3	1479	747	501	377	300	249	211	181
4	1938	979	657	494	394	326	276	238
5	2397	1211	813	611	487	403	341	294
6	2856	1443	968	728	580	480	407	350
7	3315	1676	1124	845	674	557	472	406
8	3774	1908	1280	962	767	635	537	463
9	4233	2140	1435	1079	860	712	603	519
10	4692	2372	1591	1196	954	789	668	575

*Assuming a Power Factor of .7

Estimated Run Times UPS-2200R Series																
Load (VA)	120	240	360	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920
Load (W)*	90	180	270	360	450	540	630	720	810	900	990	1080	1170	1260	1350	1440
Load (A)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
# of expansion batteries	Estimated Run Time (Minutes)															
UPS only	102	51	34	26	20	17	15	13	11	10	9	9	8	7	7	6
1	561	283	190	143	114	94	80	69	60	53	47	42	37	33	29	26
2	1020	515	345	260	207	171	145	125	109	96	84	75	66	58	51	45
3	1479	747	501	377	300	249	211	181	158	139	122	108	95	84	74	64
4	1938	979	657	494	394	326	276	238	207	181	160	141	124	109	96	84
5	2397	1211	813	611	487	403	341	294	256	224	197	174	153	135	118	103
6	2856	1443	968	728	580	480	407	350	305	267	235	207	182	161	141	122
7	3315	1676	1124	845	674	557	472	406	353	310	272	240	212	186	163	142
8	3774	1908	1280	962	767	635	537	463	402	352	310	273	241	212	185	161
9	4233	2140	1435	1079	860	712	603	519	451	395	348	306	270	237	208	181
10	4692	2372	1591	1196	954	789	668	575	500	438	385	339	299	263	230	200

*Assuming a Power Factor of .75