

Easy UPS On-Line 230V Brochure

Business continuity made easy





APC in Numbers



APC is #1 in power protection market share



96% of Fortune 500 companies use APC products



+100 million

Single-phase UPS installed worldwide



Over 75% of IT managers use APC because of durability, reliability, and trust

Why do you need Uninterruptible Power Supply (UPS)?

An Uninterruptible Power Supply (UPS) helps ensure that businesses have power protection for critical applications. A UPS provides protection for these critical systems in the event of a power disruption, whether it's a prolonged outage or just a blip that can nonetheless damage sensitive machines such as computers and cash registers.

The UPS helps provide backup power that can keep critical equipment up and running during relatively short outages. It allows you to safely power them down in the event of a longer outage and are a critical component of any business continuity plan.



Network Availability

Ability to ride out all disruptions rather than shutdown



Data Protection

Prevent damage caused by EMI/RFI interference, and other power issues



Hardware Protection

Avoid loss or corruption caused by power issues



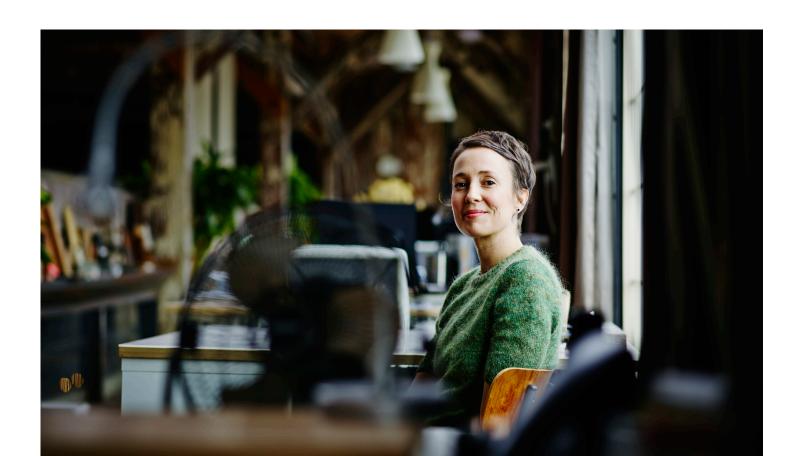
Energy Efficiency

Lower operating costs and a smaller carbon footprint



Avoid High Cost of Downtime

Maintain business operations during outages and reduce disruption costs



What is Easy UPS?

APC Easy UPS are quality products for price-conscious customers, helping to provide power protection and backup in unstable power conditions, and consistent and reliable connectivity at critical moments.

That's Certainty in a Connected World.

The key benefits of owning an APC Easy UPS:

- Provide real output power to support equipment during outages
- Pure sine wave output provides clean power to sensitive equipments
- Peace of mind from the trusted brand in power protection

Why consider APC Easy UPS?

APC Easy UPS tailors to home and business users challenges such as:





Limited budget for IT physical infrastructure



Lack of qualified on-site personnel



Expensive installation and maintenance

Easy UPS On-Line 230V

For small to medium businesses, APC[™] Easy UPS On-Line provides essential power protection and power backup for unstable power conditions, ensuring consistent and reliable connectivity at the most critical moments.

The double-conversion Easy UPS On-Line is a versatile, high quality, cost competitive UPS designed to handle a wide input voltage range and inconsistent power conditions.



Standard Models

Built-in batteries for Plug-and-Play will provide a ~2 to 4 min typical battery backup power for the connected equipment at full load.

Extended Runtime Models

Extended runtime models have the capability to add external battery packs to scale runtime from minutes to hours, making them ideal for mixed load applications.

Easy UPS On-Line Benefits



Wide kVA Range of Products

Easy UPS On-Line can support wide range of loads from 1 kVA up to 10 kVA.



Versatile Design

Rackmount and tower installation options enable flexible setup.



Extended Runtime

Extended runtime with up to 4 external battery packs caters the needs of long runtime applications.





Simplified Monitoring and Management

PowerChute™ Serial Shutdown software provides graceful unattended shutdown of servers and workstations using serial or USB cables and helps prevent data corruption and costly equipment damage.

Optional Network Management Card for remote monitoring with full Integration to EcoStruxure™ IT Software and PowerChute™ Network Shutdown.

Intuitive LCD Display



- 1. On/Off status: Indicates power is ON
- 2. On/Off button: Press to turn ON or OFF
- **3.** Alert LED: Flashes red when UPS has a notification or is in steady state when there is an alert
- **4.** Mute/Esc button: Mutes audible alarm and serves as the Escape key when in the sub menus display
- **5.** Enter key: Press to enter the display menus and choose options.
- **6.** UP/Down arrows: Navigate keys through the display menus

Ideal Applications



Telecommunication



Small Datacenter



Computer Room



Healthcare IT



Manufacturing Facility



Network Storage Devices

Easy UPS On-Line Features & Runtime

Key Features

True on-line double-conversion

Ensures clean, reliable power supply to essential loads from brownouts, line noise, voltage transients and power outages.

High power factor

- 0.9 PF for 3000 VA and below
- Unity PF, VA = Watt for 5 to 10 kVA

Powers more servers than similar UPSs with equivalent VA ratings and lower power factors.

Built-in automatic bypass

Ensures seamless power to the load even in the event of UPS internal detected fault or error.

Cold start capability

Enables user to power up connected equipment's on battery mode when utility power is not available.

High efficiency

Up to 88-94% efficiency in on-line double-conversion mode and 94-97% in ECO mode which saves utility and cooling costs without compromising performance or reliability.

Environmentally robust

Conformal coated to help protect the components from the elements, including moisture, dust and extreme temperatures.

Wide input voltage range

1000 - 3000 VA/105 - 300 Vac.

5 – 10 kVA/110 – 300 Vac, works in unstable power conditions and minimizes transfer time to battery.

LCD/LED display

Intuitive interface provides detailed and accurate information about UPS status with ability to configure locally.

Generator compatible

Generator-compatible with a wide Input Frequency range (40 – 70 Hz) ensures clean, uninterrupted power to the loads during power outage.

Emergency Power Off (EPO)

Remote UPS shutoff in the event of a fire or other emergency. The UPS can accept normally closed (NC) contacts.

2-year warranty on UPS

Comprehensive warranty for electronics and battery functionality provides peace of mind. In an unlikely event of a detected fault or error, your product will be repaired or replaced quickly.

Runtime estimates at half and full load (minutes)

Number of Battery Packs	SRV1KIL-E SRV1KRILRK-E	SRV2KIL-E SRV2KRILRK-E	SRV3KIL-E SRV3KRILRK-E	SRV5KRILRK	SRV6KIL SRV6KRILRK	SRV10KIL SRV10KRILRK
UPS at half/full load	450W/900W	900W/1800W	1350W/2700W	2500W/5000W	3000W/6000W	5000W/10,000W
(1) Battery pack (default)	50/21	67/29	34/14	22/9	18/6	8/2
(2) Battery packs	111/50	132/60	69/30	51/22	41/18	22/8
(3) Battery packs	169/77	207/95	112/50	82/37	66/29	36/15
(4) Battery packs	246/114	280/129	147/67	113/51	92/42	51/22
(5) Battery packs	288/134	328/151	209/96	145/67	118/54	66/29

Note: Runtime in the table are approximate only. All measurements taken with new, fully charged batteries, at typical environmental conditions, with no electrical input and balanced resistive load (PF = 1.0) output. For more details, refer to the Runtime graphs available in <u>apc.com</u>.

Easy UPS On-Line Accessories



Management card: AP9544



USB to dry contact for NMC: AP9811

Management cards and accessories

- AP9544: Optional Network Management Card for remote monitoring of SRV and SRVL series. The card enables full Integration to EcoStruxure[™] IT Software and PowerChute[™] Network Shutdown.
- AP9811: Optional USB to dry contact accessory for the Network Management Card (AP9544) to monitor and control a dry contact device (e.g. button, door sensor, alarm panel or float switch).
- AP9814: Optional USB to UIO accessory for the Network Management Card (AP9544) to monitor two environmental devices (e.g. Temperature Sensor (AP9335T), Temperature & Humidity Sensor (AP9335TH) or Spot Fluid Sensor (NBES0301)).
- SRVSMB001: Modbus card for communication with PCs through MODBUS protocol.
- VGL9901I: Dry contact card to monitor external triggers and initiate actions.



Battery pack: SRV72RLBP-9A



Battery pack: SRV72BP-9A



Rail kit: SRVRK2



RBC: APCRBCV203

External battery packs

- SRV36BP-9A: APC Easy-UPS Battery Pack for SRV1KIL-E.
- SRV72BP-9A: APC Easy-UPS Battery Pack for SRV2KIL-E/SRV3KIL-E.
- SRV240BP-9A: APC Easy-UPS Battery Pack for SRV6KIL/SRV10KIL.
- SRV36RLBP-9A: APC Easy-UPS Battery Pack for SRV1KRILRK-E.
- SRV72RLBP-9A: APC Easy-UPS Battery Pack for SRV2KRILRK-E/ SRV3KRILRK-E.
- SRV240RLBP-9A: APC Easy-UPS Battery Pack for SRV5KRILRK/ SRV6KRILRK/SRV10KRILRK.

Rail kits

- SRVRK1: 700 mm depth, supports 19-inch rack equipment up to 60 kg.
- SRVRK2: 900 mm depth, supports 19-inch rack equipment up to 100 kg.

Replacement Battery Cartridge (RBC)

APC Easy Replacement Battery Cartridges comes fully assembled and can be easily replaced by an APC authorized service technician. The battery cartridges are compliant with international regulations and safe for transport.

Tower Model	Compatible RBC	Rackmount Model	Compatible RBC	
SRV1KI-E	APCRBCV203	SRV1KRIRK-E	APCRBCV200	
SRV2KI-E	APCRBCV204	SRV2KRIRK-E	APCRBCV201	
SRV3KI-E	APCRBCV205	SRV3KRIRK-E	APCRBCV202	

Easy UPS Management Solutions

PowerChute[™] Serial Shutdown

For Graceful Unattended Shutdown of Servers and Workstations



Key Features

Convenience

- Initial Set-Up Wizard
- SMTP Authentication
- Password Security
- Secure Communication
- Multiple Language Support

Manageability

- Notification
- Data Logging
- Event Logging
- Run Command File
- Multiple Easy UPS Management

Protection

- Load Shedding
- Scheduling Capability
- Operating System Shutdown
- Sequenced Network Shutdown and Reboot
- Outlet Group Control

Compatibility

- System Event Log Integration
- Enterprise Management System Compatible
- PowerChute Serial Shutdown OS Compatibility

Energy Management

- Configurable energy costs
- CO2 emissions reporting
- Energy usage reporting
- Energy cost reporting

Graceful unattended shutdown of servers and workstations using serial or USB cables helps prevent data corruption and costly equipment damage. Learn More on apc.com/pcss.

Optional Easy UPS Network Management Card (AP9544)

The Network Management Card for Easy UPS On-Line (AP9544) enables secure remote monitoring and control of one Easy UPS On-Line through the easy-to-use web browser interface, via EcoStruxure™ IT Software or another SNMP-enabled system.

Key Features

Enhanced Security

- Secure Boot with Root of Trust
- Increased password security with stricter credentials and force password policy configurations
- 3-tier user access (read only, device and administrator)
- Secure access SSH, HTTPS (TLS 1.2)
- Secure file transfer (SCP)
- 2048-bit encryption key support (SSH/web)

For more information, visit apc.com/secure-nmc.

Enhanced Performance

- 1 Gigabit Ethernet connection (RJ-45 10/100/1000 Base-T)
- Simultaneous multiple user login: Supports multiple sessions

Enhanced User Experience and Troubleshooting

- Pre-loaded multiple language support
- Micro USB based console

Standard Tower Models

Product feature	SRV1KI-E	SRV2KI-E	SRV3KI-E	SRV6KI	SRV10KI		
Power rating	1000 VA/900 W	2000 VA/1800 W	3000 VA/2700 W	6000 VA/6000 W	10000 VA/10000 W		
Input							
Nominal input voltage	230 V						
Input voltage range at full load	180 – 2	285 V (110 – 285 V @ 409	% load)	176 – 300 V (110 – 300 V @ 60% load)			
Input frequency			40 – 70 Hz auto-selecting	9			
Input connection	IEC 603	320 C14	Hard wire 3-wire (1P+N+G)				
Output							
Nominal output voltage	230 V (220 V, 240 V user selectable)						
Output frequency	50/60 Hz \pm 3 Hz (On Mains) or 50/60 Hz \pm 0.1 Hz (On Battery)						
Topology		[Double-conversion on-lin	е			
Waveform type			Pure sine wave				
Efficiency: Double-conversion mode (typical)	Up to	o 88%	Up to 90%	Up to	94%		
Efficiency: ECO mode (typical)	Up to	94%	Up to 95%	Up to	97%		
Output connections	(3) IEC 60320 C13	(4) IEC 60320 C13	(6) IEC 60320 C13 (1) IEC 60320 C19	(1) Hard wire 3	-wire (1P+N+G)		
Battery type		Sealed maintenance fre	ee valve regulated lead-a	acid battery (leak proof)			
Battery capacity	12 V 9 Ah (2)	12 V 9 Ah (4)	12 V 9 Ah (6)	12 V 7 Ah (16)	12 V 9 Ah (16)		
Battery voltage	24 V	48 V	72 V	19	2 V		
Replacement battery pack	APCRBCV203	APCRBCV204	APCRBCV205	-	-		
Typical recharge time		4 hou	urs to recover 90% of cap	pacity			
Runtime at half load (min)	10	10	10	12	10		
Runtime at full load (min)	3	3	3	4	3		
Communication and management							
Interface ports		Serial RS	-232, USB (Type B), Intel	ligent Slot			
Control panel		LED indicators, mu	ılti-function LCD, status a	and display console			
Emergency Power Off (EPO)			Yes (NC contacts)				
Physical							
Dimensions W x H x D (mm)	145 x 223 x 288	145 x 238 x 400	190 x 336 x 425	190 x 685 x 374	190 x 685 x 447		
Net weight (kg)	9.6	17	26	54	65		
Colour			RAL 7010				
Operating temperature	0 to 40 °C						
Relative humidity	0 to 95% non-condensing						
Operating elevation	0 to 2,000 m at 100% load 0 to 1,000 m at 100% load						
Audible noise at 1 m from unit	Less than 50 dBA Less than 55 dBA Less th				Less than 58 dBA		
International Protection Code	IP20						
Conformance							
Regulatory approvals	C€, UKCA, TISI, IEC 62040-1, IEC 62040-2						
Standard warranty	2 years repair or replace						

All specifications are subject to change without prior notice.

* Runtime in the table are approximate only. All measurements taken with new, fully charged batteries, at typical environmental conditions, with no electrical input and balanced resistive load (PF = 1.0) output.

Standard Rack Models

Product feature	SRV1KRIRK-E	SRV2KRIRK-E	SRV3KRIRK-E	SRV5KRIRK	SRV6KRIRK	SRV10KRIRK	
Power rating	1000 VA/900 W	2000 VA/1800 W	3000 VA/2700 W	5000 VA/5000 W	6000 VA/6000 W	10000 VA/10000 W	
Input							
Nominal input voltage			23	0 V			
Input voltage range at full load	180 – 28	35 V (110 – 285 V @ 4	0% load)	176 – 3	00 V (110 – 300 V @	60% load)	
Input frequency			40 – 70 Hz a	uto-selecting			
Input connection	IEC 60	IEC 60320 C14 IEC 60320 C20			ard wire 3-wire (1P+1	N+G)	
Output							
Nominal output voltage			230 V (220 V, 240	V user selectable)			
Output frequency		50/60 Hz \pm 3 Hz (On Mains) or 50/60 Hz \pm 0.1 Hz (On Battery)					
Topology			Double-conv	ersion on-line			
Waveform type			Pure sir	ne wave			
Efficiency: Double-conversion mode (typical)	Up to	o 88%	Up to 90%		Up to 94%		
Efficiency: ECO mode (typical)	Up to	94%	Up to 95%		Up to 97%		
Output connections	(3) IEC 60320 C13	(4) IEC 60320 C13	(6) IEC 60320 C13 (1) IEC 60320 C19	(1) Hard wire 3-wire (1P+N+G)		+N+G)	
Battery and Runtime*							
Battery type		Sealed mainter	nance free valve regu	ulated lead-acid bat	tery (leak proof)		
Battery capacity	12 V 9 Ah (2)	12 V 9 Ah (4)	12 V 9 Ah (6)	12 V 7 Ah (16) 12 V		12 V 9 Ah (16)	
Battery voltage	24 V	48 V	72 V	192 V			
Replacement battery pack	APCRBCV200	APCRBCV201	APCRBCV202	SRV192RBP-7A SRV192F		SRV192RBP-9A	
Typical recharge time			4 hours to recove	r 90% of capacity			
Runtime at half load (min)	10	10	10	15	12	10	
Runtime at full load (min)	3	3	3	5	4	3	
Communication and management							
Interface ports		S	Serial RS-232, USB (T	ype B), Intelligent S	lot		
Control panel		LED indicators, multi-function LCD, status and display console					
Emergency Power Off (EPO)			Yes (NC	contacts)			
Physical							
Rack height (U)	2U	2U	2U		4U		
Dimensions W x H x D (mm)	438 x 86 x 312	438 x 86 x 462	438 x 86 x 632		438 x 173 x 710		
Net weight (kg)	11.5	18.8	28.5	6	61	69	
Colour			RAL	7010			
Environment							
Operating temperature			0 to 4	10 °C			
Relative humidity		0 to 95% non-condensing					
Operating elevation	0	0 to 2,000 m at 100% load 0 to 1,000 m at 100% load				load	
Audible noise at 1 m from unit		Less than 50 dBA Less than 55 dBA Less				Less than 58 dBA	
International Protection Code		IP20					
Conformance							
Regulatory approvals		C€, UKCA, TISI, IEC 62040-1, IEC 62040-2					
Standard warranty		2 years repair or replace					

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Extended Runtime Tower Models

Product feature	SRV1KIL-E	SRV2KIL-E	SRV3KIL-E	SRV6KIL	SRV10KIL		
Power rating	1000 VA/900 W	2000 VA/1800 W	3000 VA/2700 W	6000 VA/6000 W	10000 VA/10000 W		
Input							
Nominal input voltage			230 V				
Input voltage range at full load	180 – 2	285 V (105 – 300 V @ 40°	176 – 300 V (110 –	300 V @ 60% load)			
Input frequency		40 – 70 Hz auto-selecting					
Input connection	IEC 60320 C14	IEC 603	320 C20	(1) Hard wire 3-wire (1P+N+G)			
Output							
Nominal output voltage		230 V	' (220 V, 240 V user selec	table)			
Output frequency		50/60 Hz \pm 3 Hz (On Mains) or 50/60 Hz \pm 0.1 Hz (On Battery)					
Topology		[Double-conversion on-lin	e			
Waveform type			Pure sine wave				
Efficiency: Double-conversion mode (typical)	Up to	88%	Up to 90%	Up t	94%		
Efficiency: ECO mode (typical)	Up to	94%	Up to 95%	Up to	97%		
Output connections	(4) IEC 60320 C13	(4) IEC 60320 C13 (6) IEC 60320 C13 (1) IEC 60320 C19		(1) Hard wire 3	-wire (1P+N+G)		
Battery and Runtime*							
Battery type		Sealed maintenance from	ee valve regulated lead-a	acid battery (leak proof)			
Battery capacity	2 strings of 12 V 9 Ah (3)	2 strings of 12 V 9 Ah (6)		1 string of 12 V 9 Ah (20)			
Battery voltage	36 V	72 V		240 V			
External battery pack	SRV36BP-9A	SRV72	2BP-9A	SRV24	SRV240BP-9A		
Typical recharge time		4 hou	urs to recover 90% of cap	pacity			
Runtime at half load (min)	50	67	34	18	8		
Runtime at full load (min)	21	29	14	6	2		
Communication and management							
Interface ports		Serial RS	-232, USB (Type B), Intel	ligent Slot			
Control panel		LED indicators, multi-function LCD, status and display console					
Emergency Power Off (EPO)		Yes (NC contacts)					
Physical (PM: Power Module, BP: Battery I	Pack)						
Dimensions W x H x D (mm)(PM)	145 x 223 x 288	145 x 23	38 x 400	190 x 336 x 374	190 x 336 x 447		
Dimensions W x H x D (mm) (BP)	145 x 238 x 414	190 x 3	36 x 425	190 x 368 x 485			
Net weight (kg)(PM)	5	7.8	8.2	13	16.5		
Net weight (kg) (BP)	19.6	3	38	(30		
Colour		RAL 7010					
Environment							
Operating temperature		0 to 40 °C					
Relative humidity		0 to 95% non-condensing					
Operating elevation	0	0 to 3,000 m at 100% load 0 to 1,000 m at 100% load					
Audible noise at 1 m from unit		Less than 53 dBA Less than 55 dBA Less than 5					
International Protection Code		IP20					
Conformance							
Regulatory approvals		C€, UKC	A, TISI, IEC 62040-1, IEC	62040-2			
Standard warranty			2 years repair or replace				
All specifications are subject to change without p	rior notice						

All specifications are subject to change without prior notice.

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Extended Runtime Rack Models

Product feature	SRV1KRILRK-E	SRV2KRILRK-E	SRV3KRILRK-E	SRV5KRILRK	SRV6KRILRK	SRV10KRILRK	
Power rating	1000 VA/900 W	2000 VA/1800 W	3000 VA/2700 W	5000 VA/5000 W	6000 VA/6000 W	10000 VA/10000 V	
Input							
Nominal input voltage			230	V			
Input voltage range at full load	180 – 2	85 V (105 – 300 V @ 4	10% load)	176 – 3	300 V (110 – 300 V @	60% load)	
Input frequency			40 – 70 Hz aut	o-selecting			
Input connection	IEC 60320 C14	IEC 60320 C14 IEC 60320 C20 (1) Hard wire 3-wire (1P+N+G)					
Output							
Nominal output voltage			230 V (220 V, 240 V	user selectable)			
Output frequency		50/60 Hz \pm 3 Hz (On Mains) or 50/60 Hz \pm 0.1 Hz (On Battery)					
Topology			Double-conver	sion on-line			
Waveform type			Pure sine	wave			
Efficiency:Double-conversion mode (typical)	Up to	Up to 88%					
Efficiency: ECO mode (typical)	Up to	94%	Up to 95%		Up to 97%		
Output connections	(4) IEC 60320 C13	(4) IEC 60320 C13	(6) IEC 60320 C13 (1) IEC 60320 C19	(1) Hard wire 3-wire (1P-		P+N+G)	
Battery and Runtime*							
Battery type		Sealed maintenance free valve regulated lead-acid battery (leak proof)					
Battery capacity	2 strings of 12 V 9 Ah (2)	2 strings of 12 V 9 Ah (6)		1 string of 12 V 9 Ah (20)			
Battery voltage	36 V	72 V		240 V			
External battery pack	SRV36RLBP-9A	SRV72RLBP-9A		SRV240RLBP-9A			
Typical recharge time			4 hours to recover 9	90% of capacity			
Runtime at half load (min)	50	67	34	22	18	8	
Runtime at full load (min)	21	29	14	9	6	2	
Communication and management							
Interface ports		S	erial RS-232, USB (Ty	oe B), Intelligent SI	lot		
Control panel		LED indica	tors, multi-function LC	D, status and disp	lay console		
Emergency Power Off (EPO)			Yes (NC co	ontacts)			
Physical							
Rack height (U)		4U			5U		
Dimensions W x H x D (mm)	438 x 172 x 418	438 x 172 x 638		438 x 219.5 x 615		5	
Net weight (kg)	27.1	51.4	52.2		77	79	
Colour			RAL 70	010			
Environment							
Operating temperature			0 to 40	°C			
Relative humidity			0 to 95% non-c	condensing			
Operating elevation	0	0 to 3,000 m at 100% load			0 to 1,000 m at 100% load		
Audible noise at 1 m from unit		Less than 53 dBA Less than 55 dBA Less				Less than 58 dBA	
International Protection Code	IP20						
Conformance							
Regulatory approvals		C€, UKCA, TISI, IEC 62040-1, IEC 62040-2					
Standard warranty		2 years repair or replace					

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