

# EAT•N

# Powerware

## Powerware® 5110 UPS Uninterruptible Power System

Product Focus

350-1500 VA power protection for PC,  
telephone and networking equipment



### Features

- Protect the integrity of your data and applications by shielding electronic equipment from power outages, surges, sags, brownouts, and overvoltage conditions.
- Save space with a compact design that can be deployed as a tower, under a computer monitor, or in a rack.
- Protect loads on eight outlets—four with surge suppression and battery backup, four with surge suppression only.
- Deliver consistent, clean output with automatic voltage regulation (AVR) that doesn't drain battery power.
- Extend UPS service life with user-replaceable batteries.
- Protect networked equipment from "back door" power surges coming through LAN or telephone lines.
- Stay informed of power problems and battery conditions with audible alarms and remote alarm notification via e-mail, pager, the Web, or SNMP.
- Deliver short-term mobile power with start-on-battery capability.
- USB port and cables are standard.
- Rest easy with a two-year limited warranty, ten-year pro-rated warranty, and \$150,000 load protection guarantee (US and Canada). Optional multi-year Gold Plan service is available to provide repair and replacement coverage that goes beyond the provisions of the limited warranty.

### Product Snapshot

<b>Power Rating:</b>	350-1500 VA
<b>Voltage:</b>	120V and 230V
<b>Frequency:</b>	50 Hz and 60 Hz, auto-sensing
<b>Configuration:</b>	Plug-and-play tower, under monitor, or 2U rackmount
<b>Topology:</b>	Line-interactive

As much as business depends on electric power, public utility power is anything but dependable. By law, public utilities do not have to supply computer-grade power. That's bad news in an age when sensitive computer systems form the core of virtually all business functions. Advances in processing capacity and miniaturization make these systems more susceptible than ever to power fluctuations—and make system crashes and data losses more costly than ever.

According to National Power Laboratories (NPL) and the Electric Power Research Institute, the typical power customer location can experience an average of 24 power disturbances each month, costing the US economy \$119 billion to \$188 billion every year.

You don't have to be a part of those statistics. Effective protection is here, at a very attractive price.

# Introducing the Powerware 5110 UPS

The Powerware 5110 uninterruptible power system (UPS) provides a layer of defense between your equipment and raw utility power. This line-interactive UPS constantly safeguards your systems from power outages, surges, sags, brownouts, and overvoltage conditions—and provides varying degrees of protection from other power problems as well. If utility power is interrupted, even briefly, the Powerware 5110 UPS transfers to battery power.

## Affordable Protection for Small to Medium Organizations

Incorporating more than 40 years of UPS design experience, the Powerware 5110 UPS provides cost-effective power management, backup power, and power quality for office

workstations, PBX or key telephone systems, servers, small network nodes, point-of-sale systems, and computer peripheral devices. This UPS is ideal for any small- to mid-sized business or institutional setting where reliable power must be provided at an affordable price.

## Automatic Voltage Regulation (AVR)—Clean Power Without Draining the Battery

The Powerware 5110 UPS uses AVR to smooth out wide fluctuations in input voltage. If input voltage varies as much as 25 percent over or 23 percent under nominal voltage—which can easily happen when running on generator power or in severe environments—the Powerware 5110 UPS accepts this inconsistent voltage and delivers clean, consistent output for protected equipment. AVR

enables you to work through even the most frequent brownouts and power sags.

Unlike typical line-interactive systems, the Powerware 5110 UPS does not switch back and forth to battery power to accomplish this voltage regulation—which would shorten battery life and increase battery replacement costs. As a result, battery power is conserved for when you really need it.

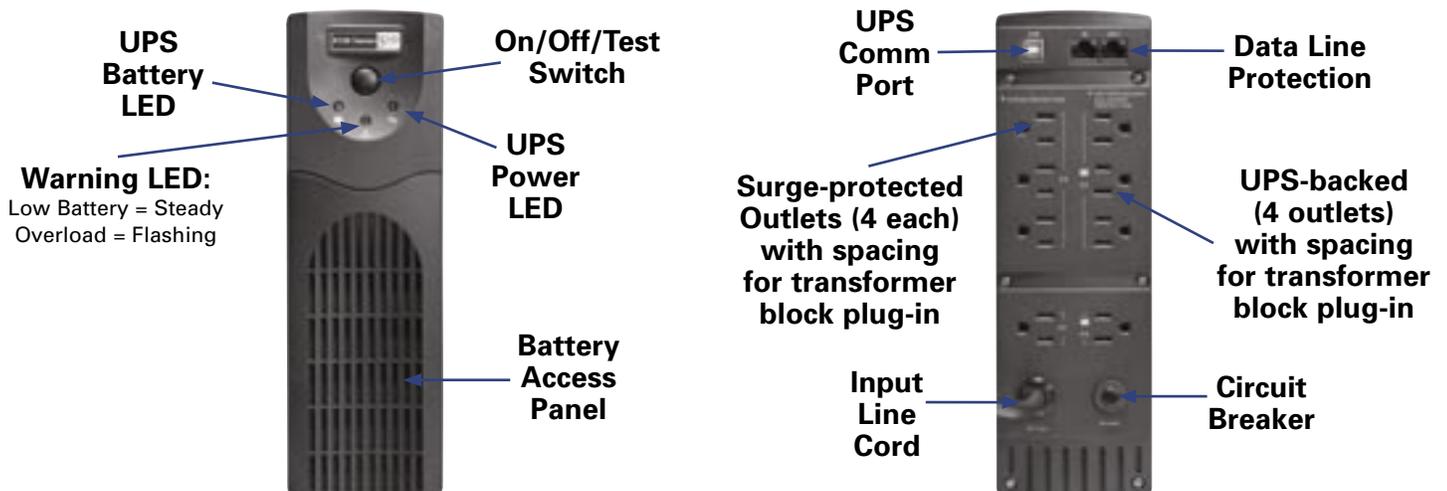
## Eight Outlets in a Low-profile Tower or Rackmount Package

The Powerware 5110 UPS occupies a small footprint—about the size of a dictionary for low-power units (350–700 VA), or a sleek tower for higher-rated models (1000–1500 VA). This tower package fits easily under a monitor or can be rackmounted in only 2U of rack space.

The cost-effective design features eight outlets, four with surge protection and battery backup and four with surge protection only. You can plug less critical equipment, such as printers or monitors, into surge-protection-only outlets that do not drain battery power.

## Protection for Data Lines

Incoming power lines aren't the only source of damaging surges. Power also travels across network links, such as LANs and telephone lines. The Powerware 5110 UPS uses an integral network transient protector to safeguard network-connected equipment—such as fax machines, modems, or electronic telephones—from “back door” power surges coming through network or phone wiring.



*The Powerware 5110 UPS delivers confidence—confidence that your vital business equipment is protected and confidence that Eaton will be there with you for the long term.*

### Short-term Power for Mobile Applications

The Powerware 5110 UPS supports start-on-battery capability, which means you can unplug the UPS from utility power, then restart and run it from battery power elsewhere. This capability offers tremendous flexibility for short-term powering needs, such as in mobile offices or service vans.

### User-replaceable Batteries for Extended Service Life

Many UPS products in this range are useful only up to the service life of their batteries. When the battery fails, the unit is worthless. Not so with the Powerware 5110 UPS. You can replace the batteries yourself—a simple process that can be performed by easy access through the front panel. When the audible alarm indicates that batteries need replacing, you can safely and easily install

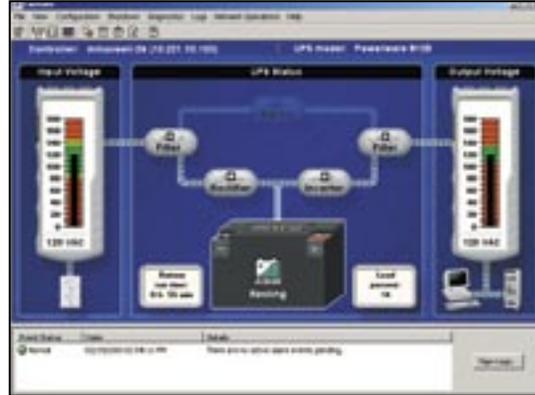
supplied batteries and remove the old batteries for proper disposal and recycling. You can also choose to return the entire unit for repair or battery replacement under our warranty and service programs.

### Easy-to-understand LEDs and Audible Alarms

You never have to guess about the status and condition of your Powerware 5110 UPS. Simple LED indicators and audible alarms warn of power problems and low battery conditions. The Battery LED illuminates when the UPS is operating on battery power. The Warning LED turns on when the battery is low and flashes under overload conditions.

### Remote UPS Monitoring from Anywhere

You don't have to be within sight of the UPS to stay informed. You can connect the Powerware 5110 UPS to a network using the built-in USB



port, and monitor its working status. The UPS comes with Powerware LanSafe™ software, free of charge. This UPS management software gives you control and visibility over all your UPSs, using an intuitive, graphical interface.

### Warranty Coverage with Load Protection Guarantee

Rest easy with industry-leading protection from Eaton. The Powerware 5110 UPS is backed by a two-year limited warranty,

a ten-year pro-rated warranty, and a \$150,000 load protection guarantee. We're that confident of the performance and reliability of the Powerware 5110 UPS.

To find out more about how the Powerware 5110 UPS can protect your critical equipment, applications, and data:  
[www.powerware.com](http://www.powerware.com)  
 800-356-5794

### BATTERY RUN TIMES (IN MINUTES)

VA	50W	100W	150W	200W	250W	350W	400W	500W	600W	700W	800W	900W
350	31	12	7	4								
500	43	17	11	6	4							
700	53	30	14	9	7	4	3					
1000	X	64	X	28	X	X	12	8	5			
1500	X	74	X	35	X	X	14	10	7	6	5	4

This guide provides typical application information. Battery run times are approximate and may vary with equipment, configuration, battery age, temperature, etc.

# Powerware 5110 Technical Specifications

<b>MODEL NUMBER</b>	<b>PW5110 350</b>	<b>PW 5110 500</b>	<b>PW 5110 700</b>	<b>PW 5110 1000</b>	<b>PW 5110 1500</b>
Part Numbers	103004255-5501	103004256-5501	103004257-5501	103004258-5501	103004259-5501
<b>MODEL NUMBER</b>	<b>PW5110 350i</b>	<b>PW 5110 500i</b>	<b>PW 5110 700i</b>	<b>PW 5110 1000i</b>	<b>PW 5110 1500i</b>
Part Numbers	103004260-5501	103004261-5501	103004262-5501	103004263-5501	103004264-5501
Capacity	350VA / 210W	500VA / 300W	700VA / 420W	1000VA / 600W	1440VA / 900W
Dimensions (HxWxD)	10.2x10.6x3.4 in	10.2x10.6x3.4 in	10.2x10.6x3.4 in	15.1x10.6x3.4 in	15.1x10.6x3.4 in
Unit Weight	11.9lb/13.0lb	12.1lb/13.4lb	15.2lb/16.5lb	28.0lb/29.1lb	29.1lb/30.2lb
Input Connections	6' Line cord with 90 deg.5-15P / IEC C14 inlet, 1.8 meter line patch cord IEC to IEC				
Output Connections	8 Outlets (4 Battery Backup & Surge Protection; 4 Surge Protection only) 5-15R IECC 13				

## OPERATION

Input Voltage Range	0-160Vac/0-300Vac
Output Voltage Range	Nominal -23% to +25%
On Battery Output Voltage	Nominal -12% to +10%
Frequency	50/60 Hz auto sensing
Lighting / Surge Protection	120v models 320 joules; 230v models 476 joules
Safety	UL 1778, Designed to meet UL497A, CAN/CSAOC22.2 No107.1/IEC 62040-1-1: CE low voltage directive
EMI	FCC Class B/IEC 62040-2, EN55022: Class B: CE EMC directive
Transfer Time to Battery/AC	2-6 msec. typical
Battery Type	Sealed, maintenance free lead-acid battery
Typical Backup Time	3 minutes at full rated load
Internet / Phone / Fax Protection	RJ11/RJ45
Short Circuit Protection	Circuit Breaker
Communication Port	USB

## ENVIRONMENTAL

Operation Temperature	0°C ~ 40°C
Operation Relative Humidity	0 to 95% non-condensing
Storage Temperature	-15°C ~ 50°C

## SOFTWARE

Powerware LanSafe Software is included free of charge.

## SERVICE PLANS

<b>POWERWARE PRODUCT</b>	<b>LENGTH OF SERVICE</b>	<b>GOLD PLAN PART NUMBER</b>
5110 350-1500VA	3 YR	3XXGX5100XALLCX
5110 350-1500VA	5 YR	5XXGX5100XALLCX

## REPLACEMENT BATTERIES

<b>MODEL NUMBER</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>
PW5110 350VA	106711158-001	BATT. KIT 350VA PW5110
PW5110 500VA	106711159-001	BATT. KIT 500VA PW5110
PW5110 700VA	106711160-001	BATT. KIT 700VA PW5110
PW 5110 1000VA	106711161-001	BATT. KIT 1000VA PW5110
PW5110 1500VA	106711162-001	BATT. KIT 1500VA PW5110

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