



POWERWARE® 9125

PowerPass® User's Guide

Requesting a Declaration of Conformity

Units that are labeled with a CE mark comply with the following harmonic standards and EU directives:

- Harmonic Standards: EN 50091-1-1 and EN 50091-2
- EU Directives: 73/23/EEC, Council Directive on equipment designed for use within certain voltage limits
93/68/EEC, Amending Directive 73/23/EEC
89/336/EEC, Council Directive relating to electromagnetic compatibility
92/31/EEC, Amending Directive 89/336/EEC relating to EMC

The EC Declaration of Conformity is available upon request for products with a CE mark. For copies of the EC Declaration of Conformity, contact:

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Koskelontie 13
FIN-02920 Espoo
Finland
Phone: +358-9-452 661
Fax: +358-9-452 665 68

Class B EMC Statements

FCC Part 15

NOTE This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ICES-003

This Class B Interference Causing Equipment meets all requirements of the Canadian Interference Causing Equipment Regulations ICES-003.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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CHAPTER 1

INSTALLATION

The PowerPass® is designed to operate with a Powerware® 9125 uninterruptible power system (UPS) and allows you to:

- Replace or upgrade the UPS without losing power to your equipment (see “Using Maintenance Bypass” on page 7).
- Provide surge protection if the UPS is not present.
- Provide extra surge protection when the UPS is present.
- Protect a laser printer against power surges without overloading the UPS (not available on 2000 VA, 120V models).

Safety Warnings

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS. This manual contains important instructions that you should follow during installation and maintenance of the UPS and batteries. Please read all instructions before operating the equipment and save this manual for future reference.

CAUTION




- There are **NO USER SERVICEABLE PARTS** inside the PowerPass. All repairs and service should be performed by **AUTHORIZED SERVICE PERSONNEL ONLY**.
- To reduce the risk of fire or electric shock, install this UPS in a temperature and humidity controlled, indoor environment, free of conductive contaminants. Ambient temperature must not exceed 40°C (104°F). Do not operate near water or excessive humidity (95% max).

The following instructions describe the PowerPass installation only. Follow the instructions in your *Powerware 9125 User's Guide* for installing the UPS and optional Extended Battery Modules (EBMs).

1. Install the UPS and optional EBMs according to the user's guide. Do not start up the UPS before installing the PowerPass. Continue to Step 6.

If the UPS is already installed and operating, prepare your equipment for shutdown and continue to Step 2.

2. Turn off the equipment that is connected to the UPS.
3. Press and hold the Off  button for approximately three seconds. The UPS switches to Standby mode and removes power from the UPS output receptacles.
4. Unplug the UPS from the power outlet; the UPS shuts down in five seconds. All front panel indicators flash briefly prior to shutdown.

On 240V units, also disconnect the input power cord from the UPS.

5. Disconnect the power cord(s) between the protected equipment and the UPS.
6. Remove the two screws on the UPS rear panel and discard (see Figure 1).

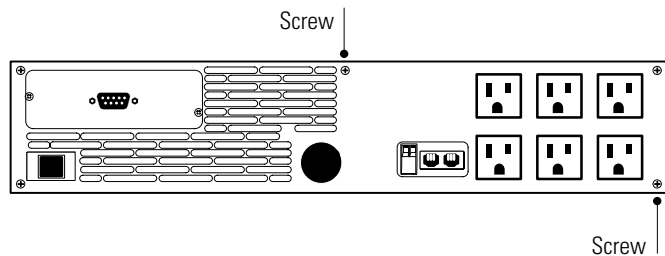


Figure 1. Removing the UPS Screws

7. Verify that both Bypass switches on the PowerPass are in the UPS position (see Figure 2 through Figure 4).
8. Plug the PowerPass into the rear panel of the UPS.
9. Secure the PowerPass with the two mounting screws and retaining washers. Do not overtighten.

10. Reconnect the power cord(s) of the protected equipment to the power output receptacles located on the PowerPass (see page 7 for more information on load segments).



NOTE The receptacle marked LASER is provided for laser printers. The power from this outlet does NOT come from the UPS output, but from utility power. Therefore, in the event of a power outage, this outlet loses power.

11. Plug the UPS power cord into the UPS-input connector (or input connector for 240V models) on the PowerPass.
12. Plug the power cord into a power outlet. All UPS front panel indicators flash briefly and the UPS conducts a self-test.

When the self-test is complete, the \sim indicator flashes, indicating the UPS is in Standby mode.

13. Start the UPS by pressing the On | button. The \sim indicator stops flashing and the bar graph indicators display the percentage of load being applied to the UPS.

The UPS is now in Normal mode and supplying power to your equipment.

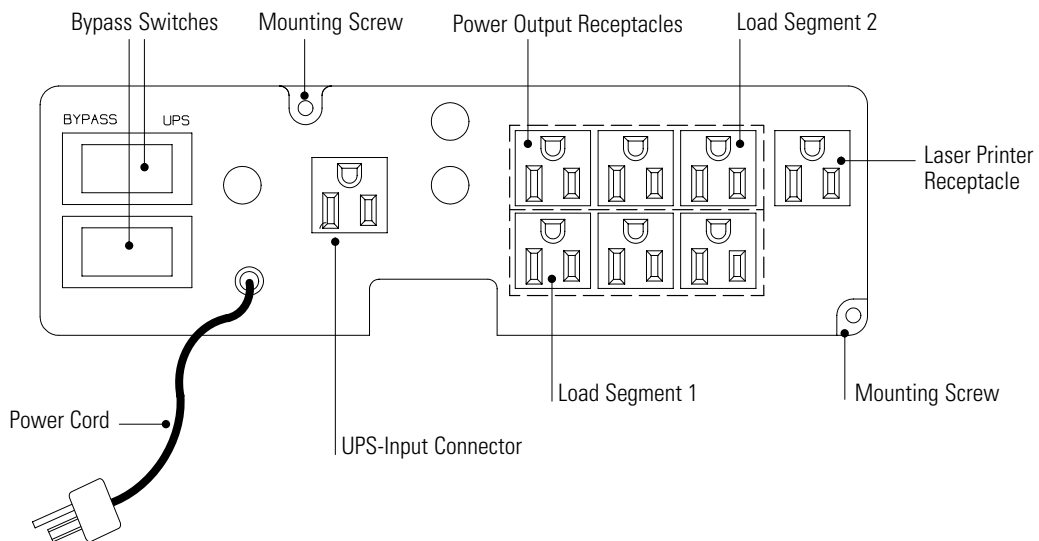


Figure 2. PowerPass for 700–1500 VA, 120V UPS

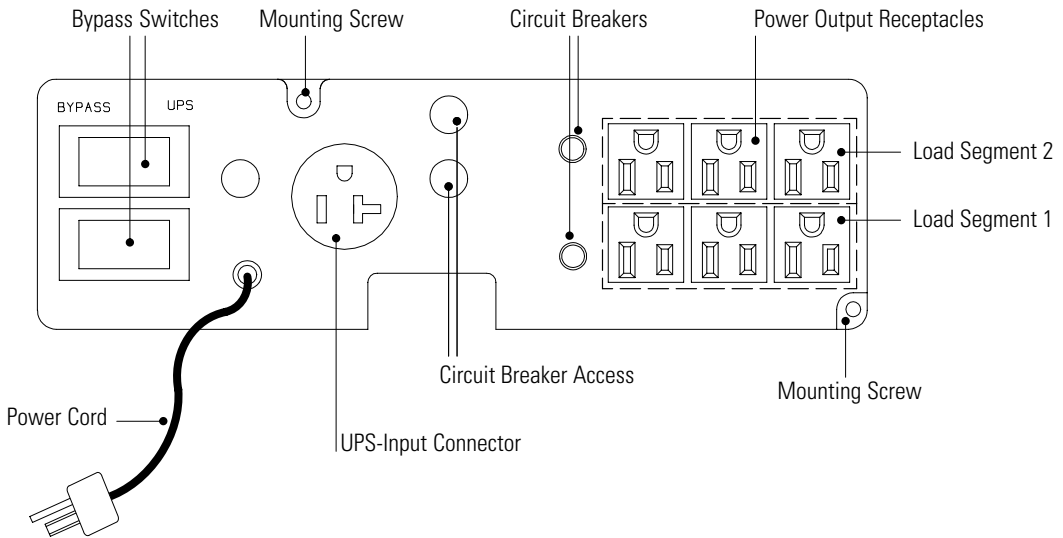


Figure 3. PowerPass for 2000 VA, 120V UPS

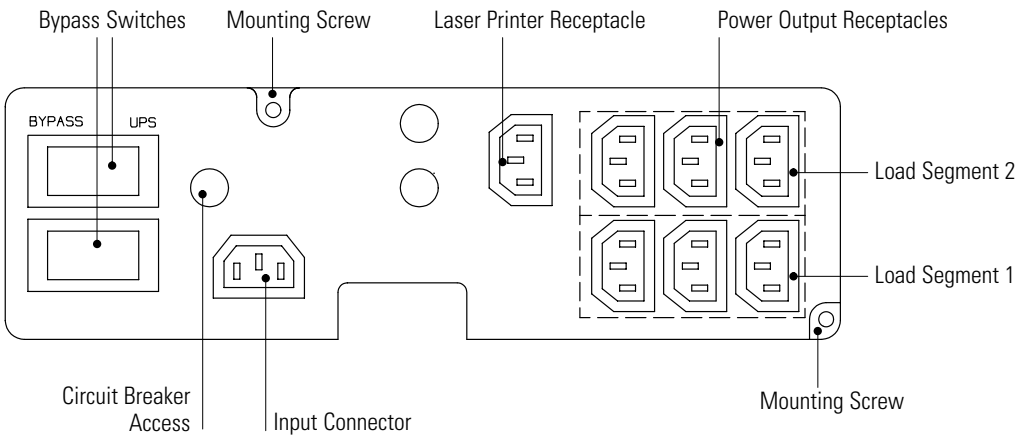


Figure 4. PowerPass for 700–2000 VA, 240V UPS



CHAPTER 2

OPERATION

The PowerPass allows for the removal of the UPS while providing power to your protected equipment. This Maintenance Bypass feature is useful when replacing the UPS for maintenance or upgrades.

Load Segments

Load segments are sets of receptacles that can be controlled by power management software, providing an orderly shutdown and startup of your equipment. For example, during a power outage, you can keep key pieces of equipment running while you turn off other equipment. This feature allows you to save battery power. See your power management software manual for details.




NOTE If the power management software is not used, the individual load segments cannot be controlled.

NOTE When the PowerPass is in Bypass mode, all load segments are switched to utility power and cannot be controlled until the PowerPass is switched back to the UPS.

Each PowerPass has two load segments as shown in Figure 2 on page 5 through Figure 4 on page 6.

Using Maintenance Bypass

Use the following procedure to transfer your equipment to Maintenance Bypass (AC Line operation) and remove the UPS:

1. Toggle both Bypass switches on the PowerPass to the BYPASS position (see Figure 2 on page 5 through Figure 4 on page 6). The PowerPass is now powering your equipment from utility power.
2. Press and hold the Off  button for approximately three seconds. The UPS switches to Standby mode.

3. If an optional EBM is installed, unplug the EBM cable from the battery connector on the UPS rear panel.
4. **120V models only.** Disconnect the UPS power cord from the PowerPass UPS-input connector.
5. Loosen the two PowerPass mounting screws.
6. Remove the PowerPass from the UPS, being careful not to loosen the power cords plugged into the PowerPass.

Use the following procedure to reinstall the UPS and transfer your equipment from Maintenance Bypass (AC Line operation) to the UPS:

1. If an optional EBM is installed, reconnect the EBM cable to the battery connector on the UPS rear panel.
2. **120V models only.** Plug the UPS power cord into the PowerPass UPS-input connector.
3. Plug the PowerPass into the rear panel of the UPS.

All UPS front panel indicators flash briefly and the UPS conducts a self-test. When the self-test is complete, the ~ indicator flashes, indicating the UPS is in Standby mode.

4. Tighten the two PowerPass mounting screws. Do not overtighten.
5. Start the UPS by pressing the On | button.
The ~ indicator stops flashing.
6. Toggle both Bypass switches on the PowerPass to the UPS position.

The bar graph indicators display the percentage of load being applied to the UPS. The UPS is now in Normal mode and supplying power to your equipment.



CHAPTER 3

SPECIFICATIONS

Table 1. Mechanical

PowerPass Models	05146519-001 for 700–1500 VA, 120V UPS 05146519-002 for 700–2000 VA, 240V UPS 05146520-001 for 2000 VA, 120V UPS
Dimensions (WxDxH)	11.0" x 4.5" x 3.5" (27.9 x 11.4 x 8.9 cm)
Weight	2.5 lb (1.1 kg)

Table 2. Technical

	120V Models	240V Models
Surge Supression	180V MOVs across input L and N; 100 joule, 6500A peak current rating 320V MOVs each across L to G and N to G; 160 joule; 6500A peak current rating	320V MOVs across input L1 and L2; 160 joule, 6500A peak current rating
Electrostatic Discharge	Withstands 25 kV	
Input Connection to PowerPass	700–1500 VA: 6-ft, 5-15P power cord 2000 VA: 6-ft, 5-20P power cord	IEC 320-C14 input connector
Input Connection to UPS	700–1500 VA: 5-15R mates with UPS 5-15P power cord 2000 VA: 5-20R mates with UPS 5-20P power cord	IEC-320 plug mates with UPS IEC-320 receptacle
Output Receptacles	700–1500 VA: (6) 5-15R; (1) 5-15R for laser printer (unprotected) 2000 VA: (6) 5-15R	(6) IEC 320-C13; (1) IEC 320-C13 for laser printer (unprotected)
UPS AC Output to PowerPass (Plug)	(2) 5-15P connect to UPS AC output	(2) IEC 320-C13 plugs connect to UPS AC output
Operating Temperature	0°C to 40°C (32°F to 104°F) Optimal battery performance: 25°C (77°F)	
Storage Temperature	-20°C to 60°C (-4°F to 140°F)	
Relative Humidity	5–96% noncondensing	



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