



Powerware®

9125

Extended Battery
Module (EBM)

For use with Two-in-One
5000/6000 VA Models

USER'S GUIDE

www.powerware.com


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Chapter 1 | Introduction

The Extended Battery Module (EBM) can be added to the 5000/6000 VA Powerware® 9125 uninterruptible power system (UPS) to extend the available UPS battery time (see Table 1). Up to four EBMs can be installed with the UPS.

Table 1. Battery Run Times (in Minutes)

Load	Internal UPS Batteries	1 EBM	2 EBMs	3 EBMs	4 EBMs
6000 VA/4200W	9.7	29.7	52.1	76.3	102
5000 VA/3500W	13.2	37.4	65.3	95.6	127.7
4000 VA/2800W	19.2	49.2	85.8	125.4	167.5
3000 VA/2100W	24.3	70.1	121.9	178.0	237.4
2000 VA/1400W	37.7	107.5	186.2	271.4	361.6

NOTE Battery times are approximate and vary depending on the load configuration and battery charge.

With the hot-swappable battery feature, UPS batteries can be added or replaced easily without turning the UPS off or disconnecting the load.

If you prefer to remove input power to change the battery, press and hold the Off  button for approximately three seconds, then unplug or remove utility power from the UPS.

Safety Warnings

Read the following precautions before you install the EBM.

IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

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



CAUTION

- ▶ Batteries can present a risk of electrical shock or burn from high short-circuit current. Observe proper precautions. Servicing should be performed by qualified service personnel knowledgeable of batteries and required precautions. Keep unauthorized personnel away from batteries.
- ▶ Proper disposal of batteries is required. Refer to your local codes for disposal requirements.
- ▶ This UPS contains its own energy source (batteries). The UPS output receptacles may carry live voltage even when the UPS is not connected to an AC supply.
- ▶ Never dispose of batteries in a fire. Batteries may explode when exposed to flame.

Sikkerhedsanvisninger



ADVARSEL

- ▶ Batterier kan udgøre en fare for elektrisk stød eller forbrændinger forårsaget af høj kortslutningsspænding. De korrekte forholdsregler bør overholdes.
- ▶ Korrekt bortskaffelse af batterier er påkrævet. Overhold gældende lokale regler for bortskaffelsesprocedurer.
- ▶ Denne UPS indeholder egen energiforsyning (batterier). Udgangsnetstikkene kan lede strøm, selv når UPS'en ikke er tilsat en AC-energikilde.
- ▶ Skaf dig aldrig af med batterierne ved at brænde dem. Batterierne kan eksplodere ved åben ild.

Belangrijke Veiligheidsinstructies



OPGELET

- ▶ Batterijen kunnen gevaar voor elektrische schok of brandwonden veroorzaken als gevolg van een hoge kortsluitstroom. Volg de desbetreffende aanwijzingen op.
- ▶ De batterijen moeten op de juiste wijze worden opgeruimd. Raadpleeg hiervoor uw plaatselijke voorschriften.
- ▶ Deze UPS bevat zijn eigen energiebron (batterijen). De uitgangsaansluitingen kunnen onder spanning staan wanneer de UPS niet op een wisselstroom voeding is aangesloten.
- ▶ Nooit batterijen in het vuur gooien. De batterijen kunnen ontploffen.

Tarkeita Turvaohjeita



VARO

- ▶ Akusto saattaa aiheuttaa sähköiskun tai syttyä tuleen, jos akusto kytketään oikosulkuun. Noudata asianmukaisia ohjeita.
- ▶ Akusto täytyy hävittää säädösten mukaisella tavalla. Noudata paikallisia määräyksiä.
- ▶ Tämä UPS sisältää oman energialähteen (akuston). Ulostuloliittimissä voi olla jännite, kun UPS ei ole liitettyä verkkojännitteeseen.
- ▶ Älä koskaan heitä akkuja tuleen. Ne voivat räjähtää.

Consignes de sécurité



ATTENTION!

- ▶ Les batteries peuvent présenter un risque de décharge électrique ou de brûlure par des courts-circuits de haute intensité. Prendre les précautions nécessaires.
 - ▶ Une mise au rebut réglementaire des batteries est obligatoire. Consulter les règlements en vigueur dans votre localité.
 - ▶ Cet onduleur renferme sa propre source d'énergie (batteries). Les prises de sortie peuvent être sous tension même lorsque l'onduleur n'est pas branché sur le secteur.
 - ▶ Ne jamais jeter les batteries au feu. L'exposition aux flammes risque de les faire exploser.
-

Sicherheitswarnungen



VORSICHT!

- ▶ Batterien können aufgrund des hohen Kurzschlußstroms Elektroschocks oder Verbrennungen verursachen. Die entsprechenden Vorsichtsmaßnahmen sind unbedingt zu beachten.
 - ▶ Die Batterien müssen ordnungsgemäß entsorgt werden. Hierbei sind die örtlichen Bestimmungen zu beachten.
 - ▶ Diese USV ist mit einer eigenen Energiequelle (Batterie) ausgestattet. An den Ausgangssteckdosen kann auch dann Spannung anliegen, wenn die USV nicht an einer Wechselspannungsquelle angeschlossen ist.
 - ▶ Batterien niemals verbrennen, da sie explodieren können.
-

Προειδοποιήσεις Ασφάλειας

ΠΡΟΣΟΧΗ



- ▶ Οι συσσωρευτές μπορεί να προκαλέσουν ηλεκτροπληξία ή έγκαυμα από υψηλό ρεύμα βραχυκυκλώματος. Λαμβάνετε τις κατάλληλες προφυλάξεις.
- ▶ Απαιτείται σωστή διάθεση των συσσωρευτών. Δείτε τους τοπικούς κανονισμούς που αφορούν τις απαιτήσεις διάθεσής τους.
- ▶ Το συγκεκριμένο UPS περιέχει τη δική του πηγή ενέργειας (συσσωρευτές). Οι ρευματοδότες εξόδου μπορεί να έχουν ενεργό τάση ακόμη και όταν το UPS δεν είναι συνδεδεμένο σε πηγή εναλλασσόμενου ρεύματος (AC).
- ▶ Ποτέ μην πετάτε τους συσσωρευτές στη φωτιά, γιατί μπορεί να εκραγούν.

Avvisi di sicurezza

ATTENZIONE



- ▶ le batterie possono presentare rischio di scossa elettrica o di ustioni provocate da alta corrente dovuta a corto circuito. Osservare le apposite istruzioni.
- ▶ le batterie devono essere smaltite in modo corretto. Per i requisiti di smaltimento fare riferimento alle disposizioni locali.
- ▶ questo gruppo statico di continuità contiene una fonte di energia autonoma (le batterie). Le prese di uscita possono condurre tensione energizzata quando il gruppo statico di continuità non è collegato con una fonte di alimentazione a corrente alternata.
- ▶ non gettare mai le batterie nel fuoco poichè potrebbero esplodere se esposte alle fiamme.

Viktig Sikkerhetsinformasjon



FORSIKTIG

- ▶ Batterier kan forårsake elektriske støt eller forbrenning på grunn av høy kortslutningsstrøm. Følg instruksene.
 - ▶ Batterier må fjernes på korrekt måte. Se lokale forskrifter vedrørende krav om fjerning av batterier.
 - ▶ Denne UPS'en har en egen energikilde (batterier). Stikkontaktene kan være strømførende selv om UPS'en ikke er tilsluttet en vekselstrømforsyning.
 - ▶ Kast aldri batterier i flammer, da de kan eksplodere, hvis de utsettes for åpen ild.
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Regulamentos de Segurança



PERIGO

- ▶ As baterias podem apresentar o risco de choque elétrico, ou queimaduras provenientes de alta corrente de curto-circuito. Observe as instruções adequadas.
 - ▶ Siga as instruções apropriadas ao desfazer-se das baterias. Consulte os códigos do local para maiores informações sobre os regulamentos de descarte de produtos.
 - ▶ Esta UPS contém sua própria fonte de energia (baterias). Os receptáculos de saída podem conter voltagem ativa quando a UPS não se encontra conectada a uma fonte de alimentação de corrente alternada.
 - ▶ Nunca jogue as baterias no fogo, porque há risco de explosão.
-

Предупреждения по мерам безопасности



ОСТОРОЖНО

- ▶ Аккумуляторы могут вызвать опасность поражения электрическим током или ожога от тока короткого замыкания. Соблюдайте соответствующие меры предосторожности.
- ▶ Необходимо соблюдать правила утилизации аккумуляторов. Обратитесь к местным нормативным актам за информацией о требованиях к утилизации.
- ▶ Данный ИБП содержит собственные источники энергии (аккумуляторы). На выходных розетках может иметься напряжение, даже когда ИБП не подключен к сети переменного тока.
- ▶ Никогда не бросайте аккумуляторы в огонь. Аккумуляторы могут взорваться под воздействием огня.

Advertencias de Seguridad



PRECAUCIÓN

- ▶ Las baterías pueden presentar un riesgo de descargas eléctricas o de quemaduras debido a la alta corriente de cortocircuito. Preste atención a las instrucciones correspondientes.
- ▶ Es necesario desechar las baterías de un modo adecuado. Consulte las normas locales para conocer los requisitos pertinentes.
- ▶ Este SIE contiene su propia fuente de energía (las baterías). Los receptáculos de salida pueden transmitir corriente eléctrica aun cuando el SIE no esté conectado a un suministro de corriente alterna (c.a.).
- ▶ Nunca deseche las baterías en el fuego. Las baterías pueden explotar si se las expone a la llama.

Säkerhetsföreskrifter



VIKTIGT

- ▶ Batterierna kan ge elektriska stötar eller brännskador från hög kortslutningsström. Följ tillämpliga anvisningar.
 - ▶ Batterierna måste avyttras enligt anvisningarna i lokal lagstiftning.
 - ▶ Denna UPS-enhet har en egen energikälla (batterier). De utgående kontakterna kan vara strömförande när UPS-enheten inte är ansluten till en växelströmkälla.
 - ▶ Använda batterier får aldrig brännas upp. De kan explodera.
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NOTE *If you are installing the UPS and the Extended Battery Module for the first time, follow the installation instructions in the UPS user's guide.*

Inspecting the Equipment

If any equipment has been damaged during shipment, keep the shipping cartons and packing materials for the carrier or place of purchase and file a claim for shipping damage. If you discover damage after acceptance, file a claim for concealed damage.

To file a claim for shipping damage or concealed damage: 1) File with the carrier within 15 days of receipt of the equipment; 2) Send a copy of the damage claim within 15 days to your service representative.



NOTE *Check the battery recharge date on the shipping carton label. If the date has expired and the batteries were never recharged, do not use the UPS. Contact your service representative.*

EBM Installation

The Powerware 9125 UPS is designed for flexible configurations and can be installed in a rack or as a standalone cabinet.

If you are installing the UPS in a rack, follow the instructions with the rail kit to set up the UPS. Otherwise, continue to the following section “Tower Setup.”

Tower Setup



NOTE *If you are installing the UPS and the EBM for the first time, follow the installation instructions in the UPS user's guide.*

NOTE *The EBM(s) must be installed to the right of the UPS as shown in Figure 1.*

The UPS and EBMs must be stabilized with joining brackets.

1. Carefully position the cabinets upright (see Figure 1).

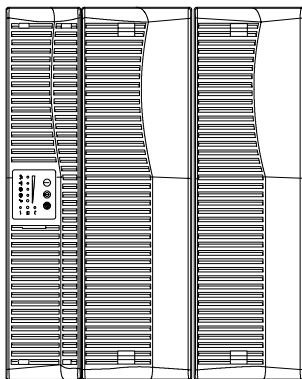


Figure 1. Tower UPS with an EBM

2. Align each joining bracket with the adjacent cabinet screw holes and secure with the supplied screws (see Figure 2).
3. If installing additional EBMs, repeat Step 2 for each cabinet.
4. Continue to the following section, "EBM Connections."

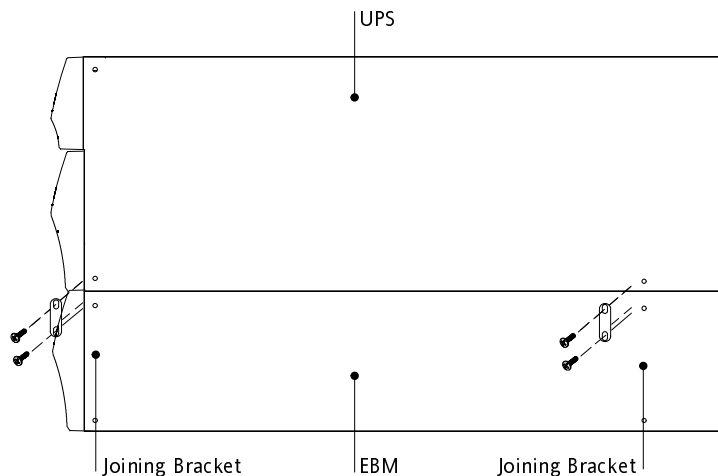


Figure 2. Installing the Joining Brackets (Top View)

EBM Connections



NOTE *If you are installing the UPS and the EBM for the first time, follow the installation instructions in the UPS user's guide.*



CAUTION

A small amount of arcing may occur when connecting an EBM to the UPS. This is normal and will not harm personnel. Insert the EBM cable into the UPS battery connector quickly and firmly.

Use the following steps to connect the EBM(s):

1. Verify that all battery circuit breakers are in the OFF (O) position (see Figure 3).
2. Plug the EBM cable into the UPS battery connector.
3. If additional EBMs are to be installed, plug the EBM cable of the second cabinet into the battery connector on the first EBM. Repeat for each additional EBM. Up to four EBMs may be connected to the UPS.

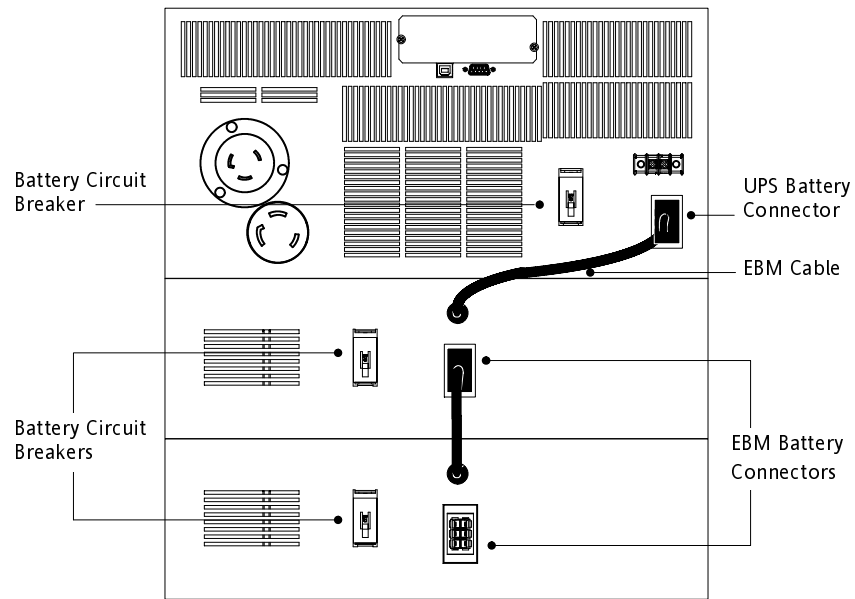


Figure 3. Typical EBM Installation

This section explains how to:

- ▶ Care for the UPS and batteries
- ▶ Replace the batteries
- ▶ Test new batteries
- ▶ Recycle used batteries

UPS and Battery Care

For the best preventive maintenance, keep the area around the UPS clean and dust-free. If the atmosphere is very dusty, clean the outside of the system with a vacuum cleaner.

For full battery life, keep the UPS at an ambient temperature of 25°C (77°F).



NOTE *The batteries in the UPS are rated for a 3–5 year service life. The length of service life varies, depending on the frequency of usage and ambient temperature. Batteries used beyond expected service life will often have severely reduced run times. Replace batteries at least every 5 years to keep units running at peak efficiency.*

Storing the UPS and Batteries

If you store the UPS for a long period, recharge the battery every 12 months by plugging the UPS into a power outlet. The batteries charge to 80% capacity in less than 2 hours. However, it is recommended that the batteries charge for 24 hours after long-term storage.

Check the battery recharge date on the shipping carton label. If the date has expired and the batteries were never recharged, do not use the UPS. Contact your service representative.

When to Replace Batteries

When the  indicator illuminates, the batteries may need replacing. Contact your service representative to order new batteries.

How to Replace Extended Battery Modules



NOTE *DO NOT DISCONNECT the batteries while the UPS is in Battery mode.*

Consider all warnings, cautions, and notes before replacing batteries.

WARNING



- ▶ Batteries can present a risk of electrical shock or burn from high short-circuit current. The following precautions should be observed:
 - 1) Remove watches, rings, or other metal objects; 2) Use tools with insulated handles; 3) Do not lay tools or metal parts on top of batteries.
- ▶ **ELECTRIC ENERGY HAZARD.** Do not attempt to alter any battery wiring or connectors. Attempting to alter wiring can cause injury.



NOTE *The batteries charge to 80% capacity in less than 2 hours. However, it is recommended that the batteries charge for 24 hours after installation or long-term storage.*

Use the following procedure to replace EBM's:

1. Switch all battery circuit breakers to the OFF (O) position (see Figure 4).
2. Unplug the EBM cable from the UPS.
If additional EBM's are installed, unplug the EBM cable from the battery connector on each EBM.
3. If the UPS is in a tower configuration, remove the EBM brackets.
4. Replace the EBM. See "Recycling the Used Battery" on page 18 for proper disposal.
If the UPS is in a rack, install the mounting brackets on the new EBM and slide into the rack.

5. Reinstall the EBM brackets if removed in Step 3.
6. Plug the new EBM into the UPS as shown in Figure 4.

For additional EBMs, plug the EBM cable into the battery connector on the adjacent EBM.

7. Remove the breaker tie from the circuit breaker on all EBMs.
8. Switch all battery circuit breakers to the ON (|) position.

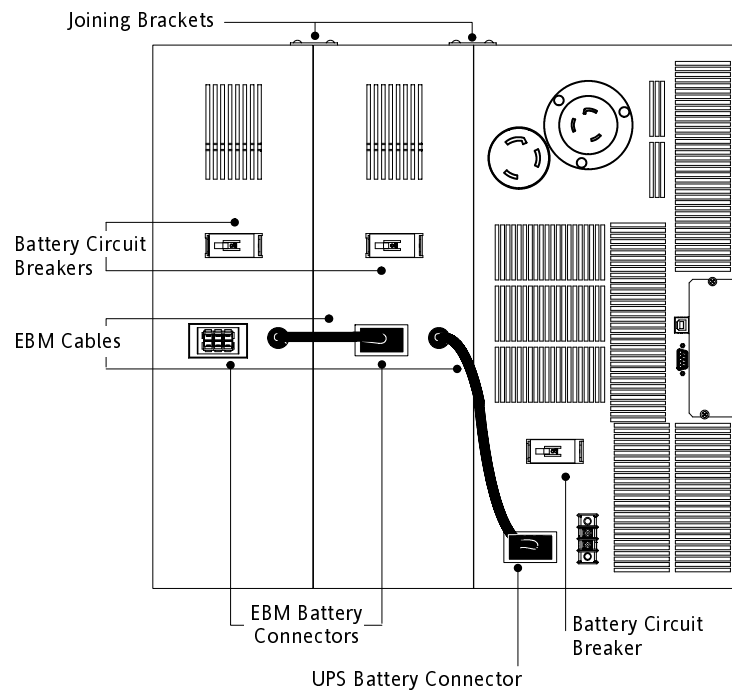


Figure 4. EBM Connections

Recycling the Used Battery

Contact your local recycling or hazardous waste center for information on proper disposal of the used battery.

WARNING



- ▶ Do not dispose of the battery or batteries in a fire. Batteries may explode. Proper disposal of batteries is required. Refer to your local codes for disposal requirements.
- ▶ Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.

CAUTION



Do not discard the UPS or the UPS batteries in the trash. This product contains sealed, lead-acid batteries and must be disposed of properly. For more information, contact your local recycling or hazardous waste center.