

7.1 Equipment care

For the best preventive maintenance, keep the area around the equipment 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 equipment at an ambient temperature of 25°C (77°F).



If the UPS requires any type of transportation, verify that the UPS is disconnected and turned off and then disconnect the UPS internal battery connector (see on page 35).

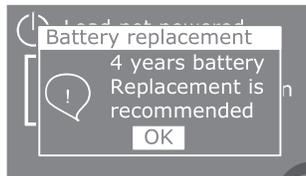
The batteries are rated for a 3-5 year service life. The length of service life varies, depending on the frequency of usage and ambient temperature. Batteries used beyond expected service life will often have severely reduced runtimes. Replace batteries at least every 4 years to keep units running at peak efficiency.

7.2 Storing the equipment

If you store the equipment for a long period, recharge the battery every 6 months by connecting the UPS to utility power. The internal batteries charge to 90% capacity in less than 3 hours. However, Eaton recommends that the batteries charge for 48 hours after long-term storage. Check the battery recharge date on the shipping carton label. If the date has passed and the batteries were never recharged, do not use them. Contact your service representative.

7.3 When to replace batteries

When the battery replacement screen is displayed, it is recommended to replace the batteries. Contact your service representative to order new batteries.



7. UPS maintenance

7.4 Replacing batteries



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

Batteries can be replaced easily without turning off the UPS or disconnecting the load. If you prefer to remove input power to change the batteries, see "UPS Shutdown" on page 25.

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



- Servicing should be performed by qualified service personnel knowledgeable of batteries and required precautions. Keep unauthorized personnel away from batteries.
- Batteries can present a risk of electrical shock or burn from high short circuit current. Observe the following precautions:
 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,
 4. Wear rubber gloves and boots.
- When replacing batteries, replace with the same type and number of batteries or battery packs. Contact your service representative to order new batteries.
- Proper disposal of batteries is required. Refer to your local codes for disposal requirements.
- Never dispose of batteries in a fire. Batteries may explode when exposed to flame.
- Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes and may be extremely toxic.
- Determine if the battery is inadvertently grounded. If inadvertently grounded, remove source from ground. Contact with any part of a grounded battery can result in electrical shock. The likelihood of such shock can be reduced if such grounds are removed during installation and maintenance (applicable to equipment and remote battery supplies not having a grounded supply circuit).
- **ELECTRIC ENERGY HAZARD.** Do not attempt to alter any battery wiring or connectors. Attempting to alter wiring can cause injury.
- Disconnect charging source prior to connecting or disconnecting battery terminals.

7. UPS Maintenance

7.1 Equipment Care

Keep the area around the UPS clean and dust-free. If the area is dusty, clean the UPS with a vacuum cleaner.

If you need to move the UPS:

1. Unplug it and turn it off
2. Unplug the internal battery connector (see on page 35)

The batteries inside have a service life of 3-5 years. The temperature of the storage area and frequency of use determine their lifespan.

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

Batteries used for too long begin to work less efficiently. Replace the batteries at least every 4 years to keep them running optimally.

7.2 Storing the Equipment

If you store the UPS for a long time, recharge the batteries every 6 months by plugging it into an outlet.

The batteries charge to 90% capacity in less than 3 hours. However, we recommend charging the batteries for 48 hours after long-term storage.

Check the battery recharge date on the shipping label that came with the UPS. If the date has passed and you didn't charge the batteries, don't use them. If you can't find the shipping label or don't know the recharge date, contact your service representative.

7.3 When to Replace Batteries

The screen on the UPS shows when the batteries must be changed.

Contact your service representative to order new batteries.

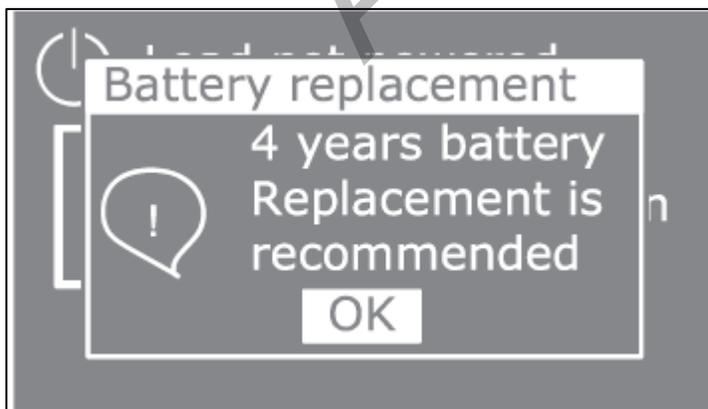


Figure 1 Battery replacement screen

7.4 Replacing Batteries

Warning: Only trained people should work with batteries. Keep others away.

Do not disconnect the batteries while the UPS is using battery power. The screen on the UPS will display when it is using battery power.

You can replace the batteries without turning off the UPS or unplugging it. If you want to shut the UPS down completely before changing the batteries, see "UPS Shutdown" on page 25.

Consider all **warnings**, **cautions**, and **notes** before attempting to replace the batteries.

Warnings

- Batteries can give you an electric shock or burn you if short-circuited
- Never throw batteries into a fire. They might explode
- Don't open or damage batteries. The liquid inside is harmful to your skin and eyes and is very toxic
- Don't put tools or metal parts on top of batteries
- Don't try to change any battery wiring or connectors; changing battery wiring can hurt you

Cautions

- Take off watches, rings, or other metal objects
- Use tools with insulated handles
- Wear rubber gloves and boots
- Avoid accidentally grounding the battery. If it is, unground it to avoid electric shock
- Reduce the chance of electric shock by removing grounds during installation and maintenance
- Disconnect the charger before connecting or disconnecting battery terminals

Notes

- When replacing batteries, use the same type and number
- Contact your service representative to get new batteries
- Dispose of batteries properly. Check local rules for disposal