

UPS BATTERY MAINTENANCE AND REPLACEMENT

Maintenance Services



Secure your Investment Maintaining Maximum Uptime

Batteries are an integral part of your critical power system and in order to **maintain maximum uptime and protect your investment**, regular inspections are advised.

Vertiv's battery maintenance, replacement and upgrade programs are carried out by expert, certified Customer Engineers and **adhere to IEEE Standards** as well as OEM specifications and requirements.

Customer Engineers inspect batteries for:

- Loose connections
- Corrosion
- Leaking or cracked cells
- Swelling
- High temperature
- Potential load loss.

All battery-related services also include system testing and maintenance.

Vertiv™ offers full-string replacement of battery systems, including expert installation of new cells, as well as certified recycling of used batteries via certified contractors.

All battery maintenance and replacement work including disposal is also compliant with all local relevant environmental requirements.

Vertiv's proactive services for Total Battery Care

Vertiv offers a full range of maintenance services for UPS battery systems, designed to maximizing battery performance and unit uptime.

Vertiv offers both **battery replacement** and **battery maintenance** programs for customers with any form of battery supported UPS. Our dedicated Customer Engineers work closely with approved supply chain partners to assess specific customer requirements, creating a replacement or maintenance program incorporating suitable battery types, lifespan and performance characteristics, as well as replacement or maintenance schedules that **maximize business continuity**. This service will protect battery supported equipment, ensuring it can rely on adequate battery back-up.

BENEFITS

- Ensuring the continuity and availability of UPS battery system
- Maintenance and replacement programs serviced by our trained Customer Engineers
- Maintain the best performance for your applications.



Comprehensive Preventive Maintenance Capabilities

Vertiv's battery maintenance-related services include **preventive maintenance, inspections** and **testing** for both vented lead acid (VLA or "flooded") and valve regulated lead acid (VRLA) batteries.

Our on-site visits and maintenance programs ensure batteries are operating correctly and in line with the manufacturer's specifications.

Maintenance is the single largest difference between normal battery life and premature failure. There are many factors affecting the life of a battery such as:

- High operating temperatures
- Corrosion
- Undercharging and overcharging
- Shorted or open cells
- Dryout
- Ageing.

A battery maintenance contract with Vertiv™ means:

- On-site inspections
- Periodic testing and assessment of batteries
- Operating environment check including ambient temperature measurement
- Battery cleaning
- Measurement of internal cell impedance test, for battery aging status
- Load bank testing
- Infrared inspection to detect possible battery overheating
- Battery disposal and certification.

A proactive battery maintenance service will help **maximize battery efficiency** and minimize risk of downtime.

Furthermore, by planning a regular preventive maintenance schedule, you will benefit from **extended battery life** and you will also be able to formulate an adequate replacement schedule.

Proactive Replacement Services

Service life of a battery is limited and depends on many factors including age, usage, environment and maintenance. **IEEE standards** recommend replacing a battery when its capacity is inferior to 80%. A single compromised battery cell, in a string of batteries, has the potential to put the entire back up system at risk.

Vertiv offers **full-string replacement** of battery systems, including **expert installation of new cells**, as well as **certified recycling** of used batteries via certified contractors and in compliance with all local relevant environmental requirements.

Our replacement and installation service supply includes:

- Valve Regulated Lead Acid VRLA batteries
- Vented Lead Acid (VLA or "flooded") batteries
- Generator starting batteries
- High Voltage tripping batteries
- NiCd batteries.

Proactively replacing batteries **assists back-up systems** in running to specifications and **maximizing the uptime** of business operations.