

Battery care ⁽¹⁾

services for maintenance contracts

Operation



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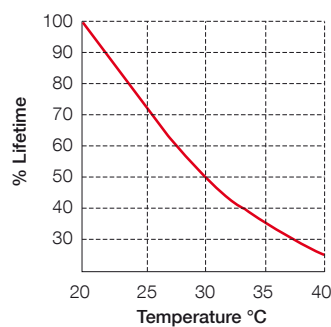
Batteries are a key element of UPS systems. Their efficiency and availability are important for preventing load downtime, but at the same time batteries are the most vulnerable and failure-prone component of such systems.

Battery failures are mainly caused by the premature “end of life” of a few battery blocks. A corrupted battery block, if not detected early and not replaced, can accelerate ageing within the rest of the battery string, therefore jeopardizing the integrity of the system.

The level of predictability for failure detection on a battery block depends on the number of measurements, tests and analyses that are performed on every single block.

Main factors for the premature end-of-life of battery blocks:

- High temperatures
- Frequent number of cycles
- Discharge too deep
- Recharging with high voltage
- Lack of regular maintenance



Source: Eurobat

STDV 288 A GB

Key points

- Impedance test, thermal imaging, temperature, voltage measurement block by block
- Faulty/weak block detection
- Back-up time measurement (optional)

Benefits

- Information on the battery's state of health
- Estimation of the optimum time for battery replacement
- Optimisation of the battery's useful working life

(1) Only for UPS.

Battery Care is a brand new set of service packages that complements the standard battery check service (at string level) during the UPS preventive maintenance visit.

The packages will ensure the integrity of your business continuity by performing the highest level of inspection on your battery blocks.

Features:

The Battery Care offering is designed around 3 packages: IMP (IMPedance), TEMP (TEMPerature) and PRIME (the full package).

ACTIONS	WHERE	BATTERY CHECK	BATTERY CARE		
			IMP	TEMP	PRIME
Visual inspection check for leakage and corrosion	string	•	•	•	•
Cleaning	string	•	•	•	•
Measurement with partial discharge of V & I	string	•	•	•	•
Environment temperature check	string	•	•	•	•
Control of floating voltage and max current*	string	•	•	•	•
Impedance test	each block		•	•	•
Temperature measurement	each block			•	•
Voltage measurement*	each block			•	•
Thermal imaging	each block				•
Torque setting	each block				•
Back-up time measurement**	string		○	○	○

•: inclusive.

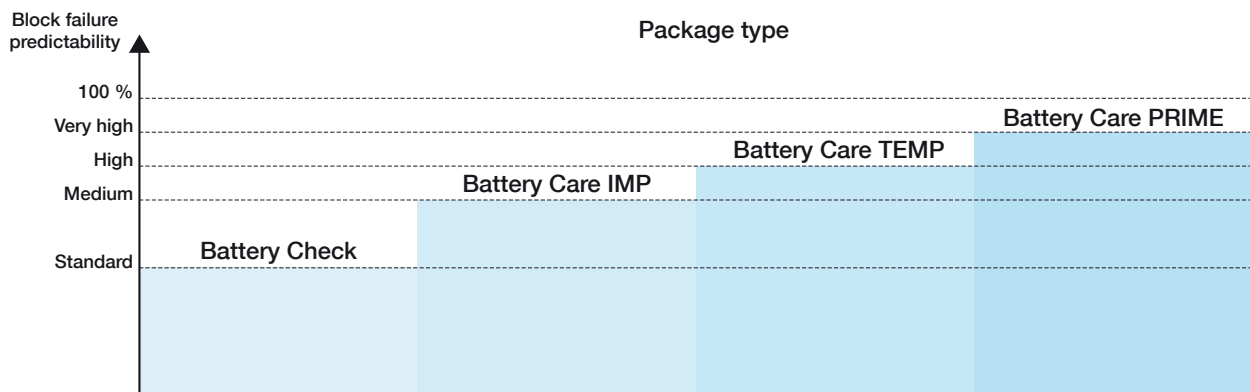
○: optional.

* during battery charge. **: by performing the end of discharge voltage test.

Depending on the package chosen (IMP, TEMP, PRIME), a set of accurate measurements, tests and analyses will be performed on each single block across all battery strings by Socomec trained engineers.

An in-depth report will provide information about:

- the health of each single battery string/block,
- the faulty blocks that need to be replaced,
- the real “back-up time” of the battery system (optional).



SVC 007 A GB

Do you know your real back-up time?

- > For various external factors, your real back-up time could be much less than the one declared by the battery manufacturer.
- > Thanks to a specific set of measurements and analyses, Socomec can provide you with the exact back-up time of your battery system.