



# Technical Data Sheet AVIAKKU

AVIakku is a rechargeable battery in block format (4R25), specifically developed for warning and signal lights. It is the perfect solution for reliable, environmentally friendly, and above all cost-efficient operation of your warning lights. With a runtime of up to 60+ days (25Ah) and 110+ days (45Ah) in continuous operation, more than 1,000 charge cycles, and very low self-discharge, AVIakku not only provides cost savings but also reduces waste and recycling expenses. Ideal for companies that value efficiency and sustainability.



## Cost efficiency

After 10–18 months, AVIakku reaches break-even compared to disposable batteries. After that, only minimal costs for charging remain. At the same time, the long runtimes significantly reduce maintenance effort and noticeably lower operating costs.



## Runtime

A single charge lasts up to 60+ days (25Ah) and 110+ days (45Ah) in continuous operation. In flashing mode, the runtime can increase up to threefold depending on the signal light. Numerous field tests with common light models confirm these values.



## Self-discharge

Lithium-ion cells exhibit only minimal self-discharge during storage, unlike disposable batteries, which are often already empty before use. The low self-discharge of AVIakku can be easily compensated by recharging.

## Additional relevant information:

- **Runtime estimation:** Using our in-house simulation battery, the runtime of the AVIakku can be determined within minutes for your specific light models. This allows you to know exactly how many days the battery will operate in your warning beacon, enabling precise planning of replacement intervals and reducing costs.
- **Check battery status with AVItester:** The AVItester allows you to reliably determine the charge level of an AVIakku. This ensures you always know whether the battery is ready for use. With disposable batteries, this condition is generally not reliably assessable.
- **Energy efficiency:** Recharging batteries allows for more flexible usage periods. Disposable batteries are often discarded after each construction site, even though they may still have remaining capacity. Due to the unknown battery status, the risk of using a nearly empty battery is too high, so a new battery is usually used instead.



## Technical specifications:

Properties	AVIakku 25Ah	AVIakku 45Ah
Cell chemistry	Lithium-ion	Lithium-ion
Nominal voltage	3,6V	3,6V
Capacity	25Ah	45Ah
Energy content	90 Wh	162 Wh
Charge cycles	> 1000	> 1000
Operating temperature	-20°C to +60°C	-20°C to +60°C
Storage temperature	0°C to 23°C	0°C to 23°C
Protection rating	IP64	IP64
Dimensions (L x W x H)	66x66x110	66x66x110
Weight	430g	720g
Housing material	ABS	ABS

## Compatibility:

- Suitable for standard warning beacons with 6V block battery compartment (4R25).
- Can be used in single or dual-slot configurations (depending on device type).
- Compatible with warning beacons from leading manufacturers (e.g. Horizont, Nissen, Detas).

## Certifications & Compliance:

AVIakku complies with the following directives and standards:

- **UN38.3:** Transport regulations for lithium batteries.
- **IEC 62133-2:** Safety requirements for portable lithium-ion batteries.
- **Directive 2011/65/EU (RoHS):** Restriction of hazardous substances in electrical and electronic equipment.
- **REACH-Regulation (EC) No. 1907/2006:** All materials and components comply with requirements for chemical substance registration and evaluation.
- **Directive 2006/66/EC:** Batteries and accumulators directive (environmental requirements and labeling obligations).