



After years of research on the ground and in the air, these batteries have proven themselves highly superior to conventional lead-acid or nickel-cadmium batteries. The advantages are clearly visible.

Easy Maintenance:

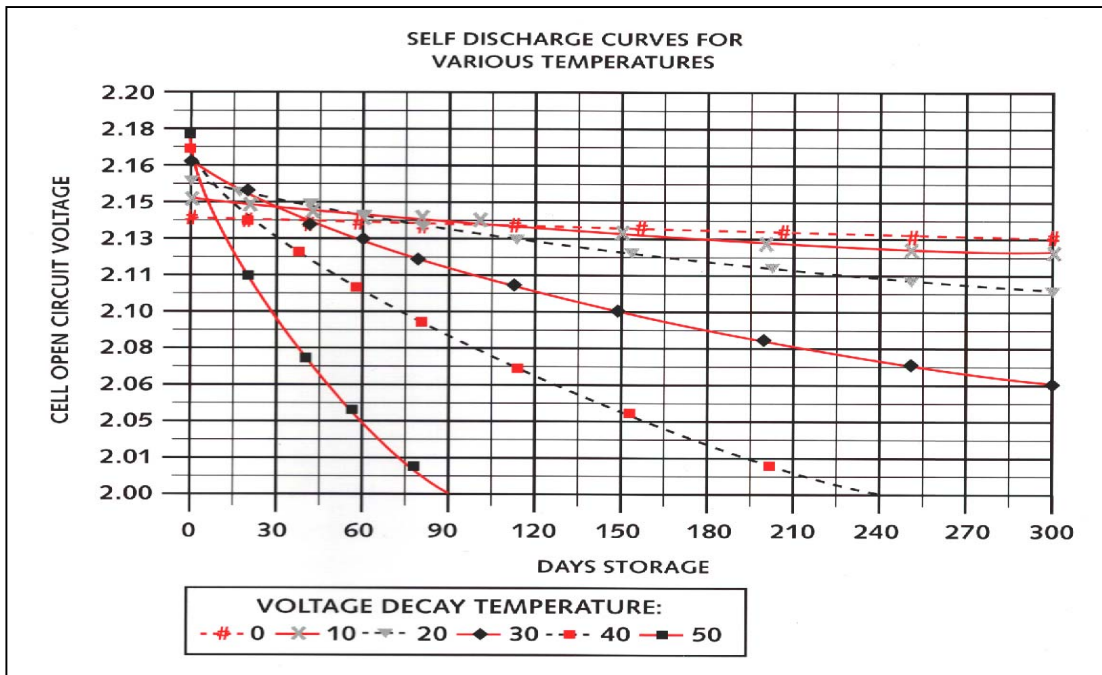
Maintenance is reduced to a visual inspection and regular recharge every 6 months. Compared to other types of batteries, where constant maintenance is required sometimes as often as weekly, this is a favourably long period. The batteries are supplied fully charged and tested. Discharge tests or deep cycles are not necessary and not recommended. With the internal charger, the case may be connected to charging current indefinitely.

Unlimited Transportability:

By design, these batteries are classified as "non-hazardous" and can be transported fully charged on airplanes or helicopters, keeping them always ready to use.

Storage:

Special storage or load bays are not necessary. The batteries can be recharged or discharged in every room, including rooms used for nickel-cadmium batteries. They can be recharged with every charger with an I/E characteristic (charging voltage and charging current) limiter. Due to the special chemistry of the system the self discharge ratio is remarkably low.

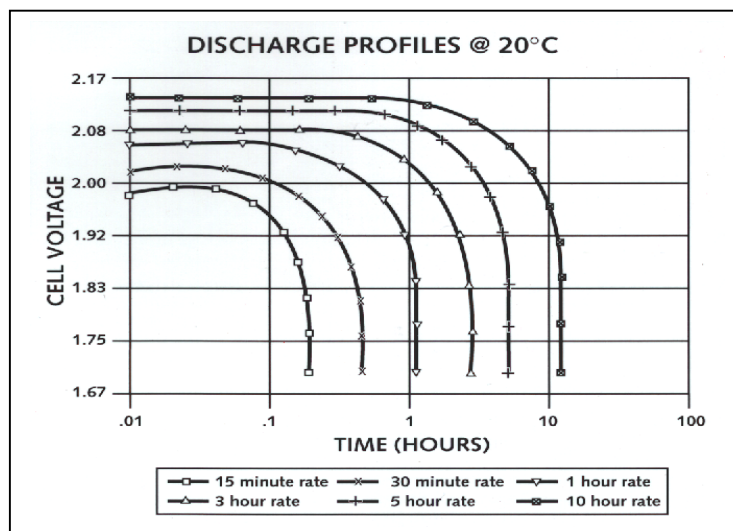


Safety:

Since the batteries do not contain a liquid electrolyte they cannot leak in a fall or by gassing, there is no danger of corrosion. The sealed construction permits the Portable Starting Unit to operate in any position (except inverted).

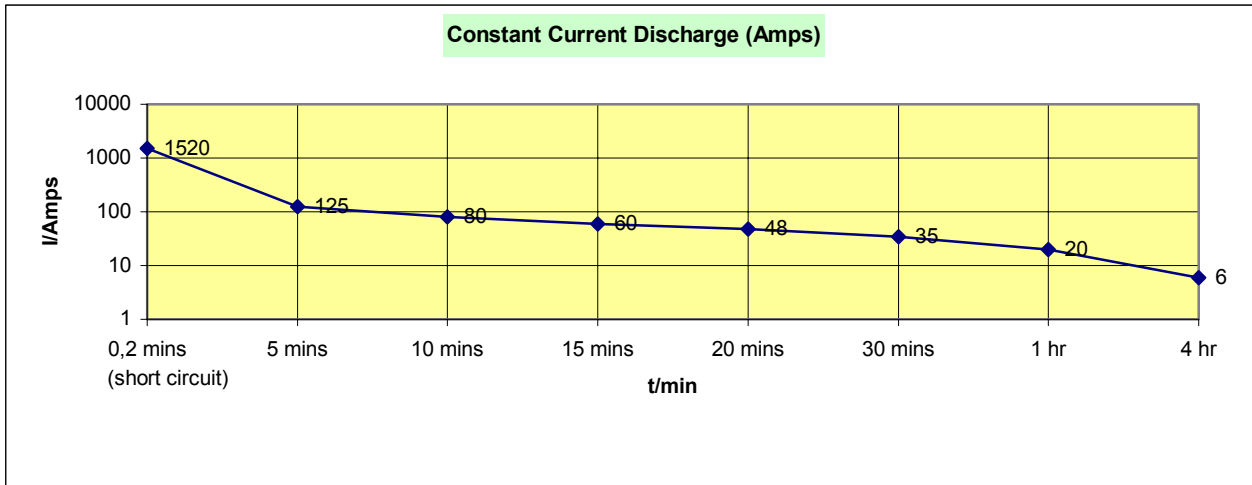
Discharge:

Due to the extremely low inner resistance the batteries are able to keep the voltage during high current discharge at a remarkable high level.



Capacity:

The following diagram shows the usable capacity depending on the drained current.



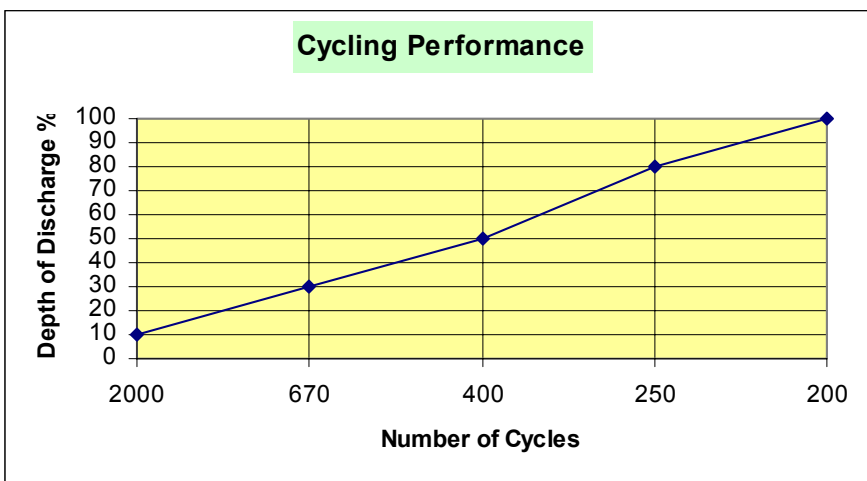
Deep Cycling:

Using the latest battery technology, the recharging after a deep cycle presents no problem. A so called "memory effect" is non-existent. Just recharge the battery case in a timely fashion.

Service Life

The number of cycles of our product depends on the depth of discharge and the following factors:

- Discharge rate / Discharge end point voltage
- Recharge voltage
- Recharge time
- Operating temperature, etc



Technical Data:

The heart of the "Portable Starting Unit" is its lead battery using gas recombination technology. It is not identical to the conventional gel batteries in its construction, and its mode of operating is entirely different. The positive and negative plates are manufactured from a multitude of pure lead screens. The individual screens are each separated by fibre-glass. The electrolyte consists of a paste and is different at the positive and negative plates. The battery case is completely sealed. With this design, it is possible to use or store in every position. The shelf and service temperature is between -30°C and $+60^{\circ}\text{C}$ (-22°F and $+140^{\circ}\text{F}$).

Normal recharging of the batteries will be done through the installed charger. However, every standard charger with stabilized I/E characteristics can be used. Continuous charging voltage for the 24 volt unit is 27.2 volt.

AS 24-30:



- output 24 Volt DC
26 amp/hour continuous power
1520 amp peak starting power
- recharge rate: 3 amp
110 – 240 Volt input (auto-select)
- waterproof plastic case
- equipped with flat standard aviation plug
- weight: 28 kg (62 lbs)
- it can be used for most piston engines

AS24-40:



- Output 24 Volt DC
37 amp/hour continuous power
2160 amp peak starting power
- Recharge Rate: 3 amp
110 – 240 Volt input (auto-select)
- supplied in 2 cases to maintain portability
- equipped with flat standard aviation plug
- weight: 30 kg + 2 kg (66 lbs + 4.5 lbs)
- it can be used for most piston engines and smaller turbines

WARRANTY:

The Portable Starting Unit is covered by a limited warranty for 6 months (from date of purchase).