



12/310Ahr AGM Battery

Storage Built for Solar

High Performance, High Capacity Solar Power Cells

SunnyCal Solar Batteries are superior to most other high current and performance cells due to the much new technological advancements they contain. The main advantages are:

- **Sealed Construction**
The unique construction and sealing techniques of SunnyCal Solar Batteries guarantee leak proof operation in any position with no adverse effect to capacity or service life. SunnyCal Solar Batteries are classified as non-spill able, non-hazardous. Our batteries are not restricted from surface, maritime, and air transport applications.
- **Electrolyte Suspension system**
SunnyCal Solar Batteries utilize an electrolyte suspension system consisting AGM (Absorbed Glass Matt) of a high porosity that totally absorb and contain the electrolyte. No silica gels or any other contaminants are used.
- **Gas Generation**
SunnyCal Solar Batteries incorporate a built-in design that controls gas generation and induces recombination of more than 99% of gases generated during float usage.
- **Maintenance Free Operation**
There is no need to check specific gravity of the electrolyte or add water to SunnyCal Solar Batteries during float service life. SunnyCal Solar Batteries are air tight; In fact, there is no need for this type of maintenance.
- **Low Pressure Valve Regulated System**
All SunnyCal Solar Batteries are equipped with safety release valves, designed to operate between 0.98 -196.1kpa and automatically reseals. Hence, there is never an excessive accumulation of gas within the battery.
- **Heavy Duty Grids**
Heavy duty lead tin alloy grid plates provide an extra margin of performance and service life in either float or cyclic applications, even after many repeated over discharges.
- **Cyclic Service Life**
SunnyCal Solar Batteries are known to deliver one of the highest numbers of discharge / recharge cycles of any AGM battery. More than 1000 discharge / recharge cycles can be realized from SunnyCal Solar Batteries before diminishing loss of charge capability. Depending on the average depth of discharge SunnyCal Solar Batteries will stay perfectly efficient 15 to 20 times longer than a standard lead acid battery. The chart below will give you a guideline of how efficient SunnyCal Solar Batteries really are:

<u>Depth of Discharge</u>	<u>Number of Cycles (VMAX)</u>	<u>Number of Cycles (Lead Acid)</u>
100%	300	15 to 30
75%	600	30 to 45
50%	900	45 to 60
25%	1500	60 to 75
10%	2500 +	75 to 100

The charging plates in standard lead acid batteries begin to crumble within less than 30 discharges at 100% of discharge.

- **Float Service Life**
SunnyCal Solar Batteries have an expected life span of 8 to 10 years in float service applications.
- **Low Self Discharge**
The self-discharge rate of SunnyCal Solar Batteries at room temperature is approximately 1%-2% of rated capacity per month (compared to 2 % - 4% for most other AGM batteries, and a 15% - 20% rate for lead acid batteries).
- **Operating Temperature**
Due to SunnyCal Solar Battery internal construction, and special additives, our cells can be operated over a broad range of ambient temperatures.
- **Deep Discharge Recovery**
SunnyCal Solar Batteries recover their capacities even after repeated deep discharges.
- **Higher Power Density**
A special assembly technology is used to enhance our power density to a considerable level.
- **Reliable Construction**
The extra strong construction ABS container reduces case bulging and plate warping, ensuring long life and high performance.
- **Super Low failure Rate**
Due to our superior engineering and construction methods, our failure rate is one of the lowest in the industry.