

Energy Matters



**Azimuth
Solar
Products Inc.**



Sacred Sun Lead Carbon Batteries

*The Power of
Lithium Without
the Cost*

The patented technology from Furukawa

Japanese Furukawa battery company's advanced lead carbon technology, product design, and manufacturing experience, produces high performance AGM VRLA batteries with deep cycles for a superior energy storage system.

Extremely long cycle life

Using long-life technology and design, more than 5000 cycles @50% DOD, design life is 15 years.

Innovative Lead Carbon Technology

Using lead carbon technology improves the charge acceptance ability, reduces the negative plate sulphation, and is more suitable for partial state of charge (PSOC) applications.



SACRED SUN

AUTHORIZED DEALER

Advantages of Lead Carbon versus Lithium batteries and Lead-Acid:

- No BMS (Battery Management System) is needed to prevent over-charging and under-charging on a per cell basis.
- No thermal run-away risk of individual cells overheating, exploding, and burning.
- Much greater kW storage capacity per dollar compared with lithium. Approximately twice the storage capacity, or about half the price for the same kW capacity.
- Easy to carry modular system where each battery can be carried and put in place, without needing any lifting equipment.
- Suitable for On-Grid Hybrid and Off-Grid systems due to high discharge amperage capacity.
- No Cooling fans/system needed for lead-carbon batteries.
- Much higher energy density and longer life in the same size (or smaller) package compared with existing AGM / GEL and Flooded Lead Acid Batteries.
- No harmful and toxic gases coming off lead-carbon batteries.

FCP-500 discharge table (End voltage 1.80V/cell, 25°C)

Discharge time (h)	1	2	3	4	5	6	7	8	9	10
Constant current (A)	302	198	147	117	99	86	76	69	61	54
Constant Power (W)	575	380	284	229	196	171	150	136	122	110

Note: The max. charge current should be controlled in $0.1C_{10} \sim 0.2C_{10}$

