

Product Features

The technology coming from Furukawa

Introduction of Japanese Furukawa battery company advanced lead carbon technology, product design and manufacturing experience, produce high performance AGM VRLA battery with deep cycle for energy storage system.

Super long cycle life

Using long-life technology and design, more than 4200 cycles @ 70% DOD, design life is 15 years.

Leading lead carbon technology

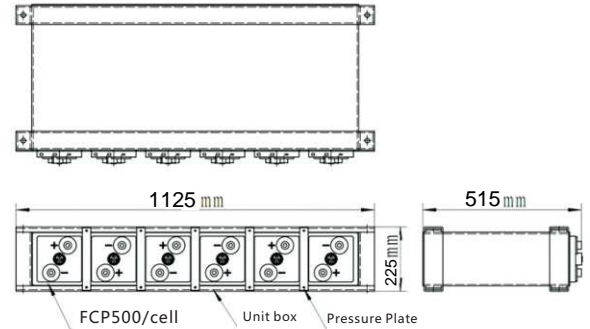
Using lead carbon technology, improve the charge acceptance ability, reduce the negative plate sulphation, more suitable for the partial state of charge (PSOC) application.

Advanced manufacturing technology

Advanced manufacturing technology and strict manufacturing process, ensure the consistency and reliability of the product.

Modular system design

Modular design and installation, compact structure, saving the installation area and space, easy installation, convenient maintenance.



FCP-500-12 module dimension

Nominal voltage		2V
Nominal capacity@25°C		500Ah(C ₁₀)
Nominal capacity		1000Wh
Weight		41kg
Dimensions	H	508mm
	W	172mm
	L	166mm
Mass energy density		24Wh/kg
Volume energy density		69Wh/L
Max. current	Charge	0.2C ₁₀ A
	Discharge	0.4C ₁₀ A

Applications

- Distribution generation
- Micro-grid power plant
- New energy access
- Smart grid

Product Discharge Table

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

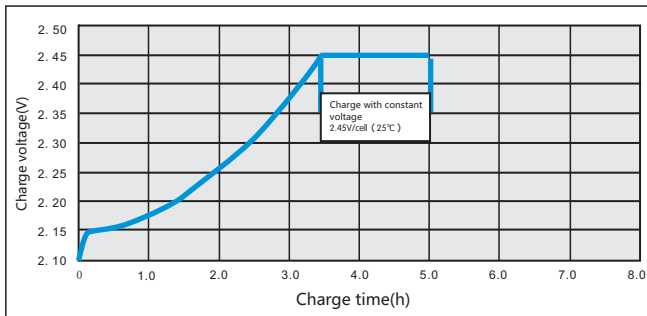
Discharge time (h)	1	2	3	4	5	6	7	8	9	10
Constant current (A)	302	198	147	117	99	86	76	69	61	54
Constant power (W)	575	380	284	229	196	171	150	136	122	110

FCP-500 discharge characteristic table

Environment temperature	Discharge rate	Discharge current	Nominal capacity	Actual capacity 70% DOD	Actual discharge power	Actual discharge time
25°C	0.10C	50A	500Ah	350Ah	700Wh	7.0h
25°C	0.16C	80A	425Ah	298Ah	595Wh	3.7 h
25°C	0.23C	115A	375Ah	263Ah	525Wh	2.3 h
25°C	0.40C	200A	300Ah	210Ah	420Wh	1.1 h
5°C	0.10C	50A	465Ah	326Ah	651Wh	6.5h
5°C	0.16C	80A	385Ah	270Ah	539Wh	3.4h
5°C	0.23C	115A	335Ah	235Ah	469Wh	2.0h
5°C	0.40C	200A	265Ah	186Ah	371Wh	0.9h

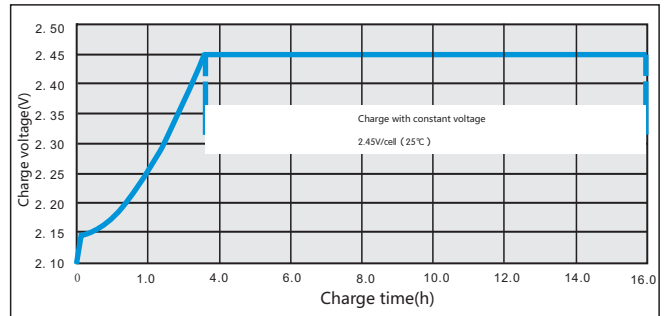
Performance curve

Cycle charge curve



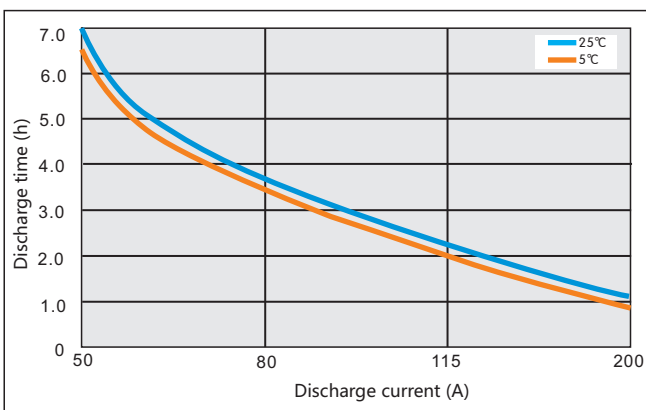
Note: The max. charge current should be controlled in $0.1C_{10} \sim 0.2C_{10}$

Equalizing charge curve



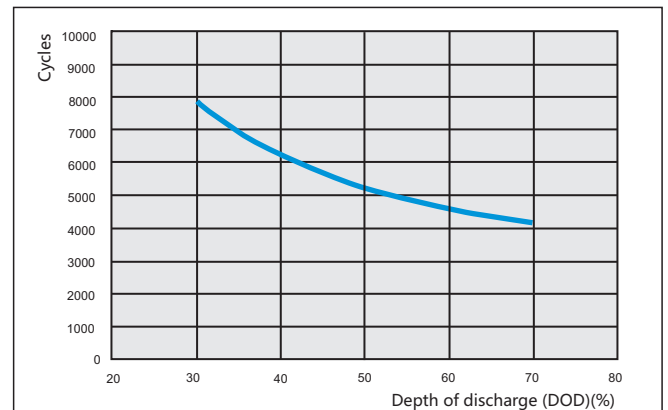
Note: The max. charge current should be controlled in $0.1C_{10} \sim 0.2C_{10}$, need regularly equalizing charge.

Discharge current VS discharge time curve



Note: The best discharge current is 50A or lower, discharge time can reach above 7hours, maximum discharge depth is 70%

Depth of discharge vs cycles curve



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