

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

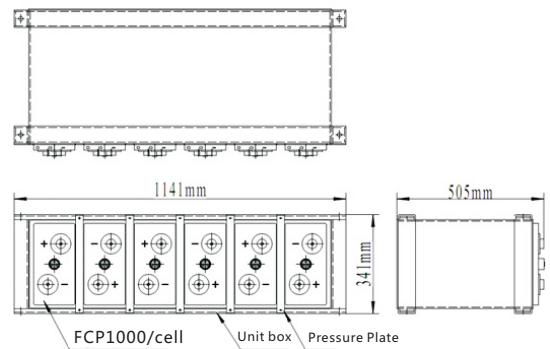
Using lead carbon technology, improve the charge acceptance ability, reduce the negative plate sulphation, more suitable for the partial state of charge (PSOC) application.

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-1000-12 module dimension

| | | |
|-----------------------|-----------|--------------------------|
| Nominal voltage | | 2V |
| Nominal capacity@25°C | | 1000Ah(C ₁₀) |
| Nominal capacity | | 2000Wh |
| Weight | | 75kg |
| Dimensions | H | 508mm |
| | W | 172mm |
| | L | 303mm |
| Mass energy density | | 27Wh/kg |
| Volume energy density | | 79Wh/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-1000 discharge table
(End voltage 1.80V/cell, 25°C)

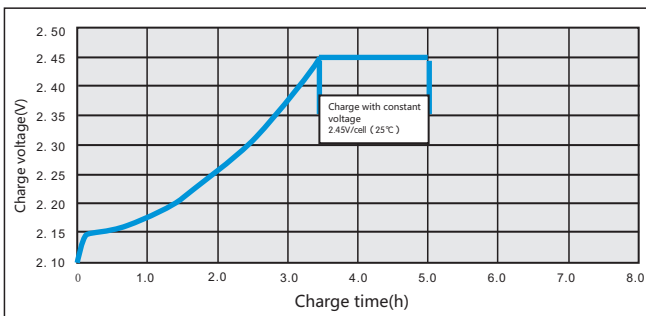
| Discharge time (h) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Constant current (A) | 689.6 | 405.6 | 297.4 | 238.6 | 201.1 | 174.9 | 155.4 | 140.3 | 128.2 | 118.3 |
| Constant power (W) | 1310.5 | 774.6 | 569.5 | 457.8 | 386.5 | 336.6 | 299.5 | 270.6 | 247.5 | 228.5 |

FCP-1000 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 | 100A | 1000Ah | 700Ah | 1400Wh | 7.0h |
| 25°C | 0.16C | 160A | 850Ah | 595Ah | 1190Wh | 3.7 h |
| 25°C | 0.23C | 230A | 750Ah | 525Ah | 1050Wh | 2.3 h |
| 25°C | 0.40C | 400A | 600Ah | 420Ah | 840Wh | 1.1 h |
| | | | | | | |
| 5°C | 0.10C | 100A | 930Ah | 651Ah | 1302Wh | 6.5h |
| 5°C | 0.16C | 160A | 770Ah | 539Ah | 1078Wh | 3.4h |
| 5°C | 0.23C | 230A | 670Ah | 469Ah | 938Wh | 2.0h |
| 5°C | 0.40C | 400A | 530Ah | 371Ah | 742Wh | 0.9h |

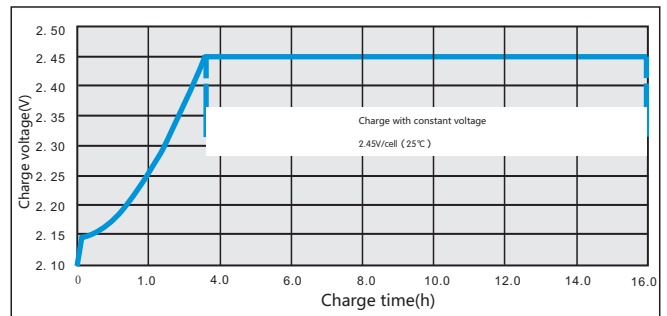
Performance curve

Cycle charge curve



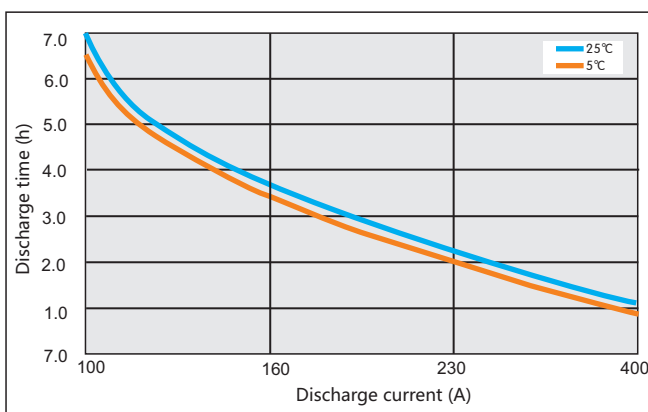
Note: The max. charge current should be controlled in $0.1C_{10} \sim 0.2C_{10}$

Equalizing charge curve



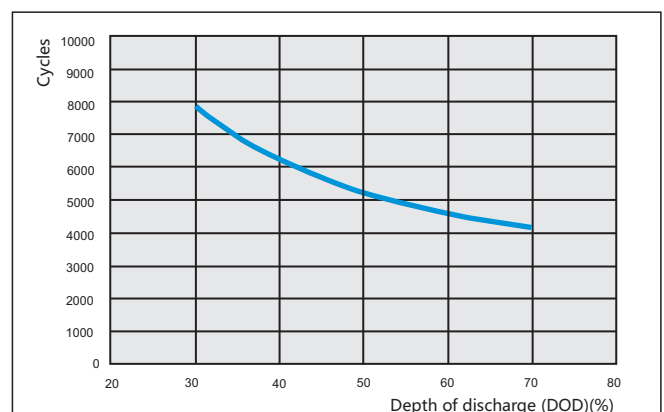
Note: The max. charge current should be controlled in $0.1C_{10} \sim 0.2C_{10}$, need regularly equalizing charge.

Discharge current VS discharge time curve



Note: The best discharge current is 100A or lower, discharge time can reach above 7hours, maximum discharge depth is 70%

Depth of discharge vs cycles curve



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