

# GFMJ Series

## GFMJ-600 2V600Ah

GFMJ series gel batteries utilize advanced battery manufacturing technology. It has good cyclic and high-low temperature performance, special electrolyte design and good charge acceptance ability. GFMJ can be used in high-low temperature environment with poor grid condition. It is optimal for pure cyclic solar, wind and energy storage systems.

### Benefits

- Very long life according to EUROBAT Classification
- High discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC or PF micro-porous separator ensure Low self-discharge rate
- Easy installation and handling

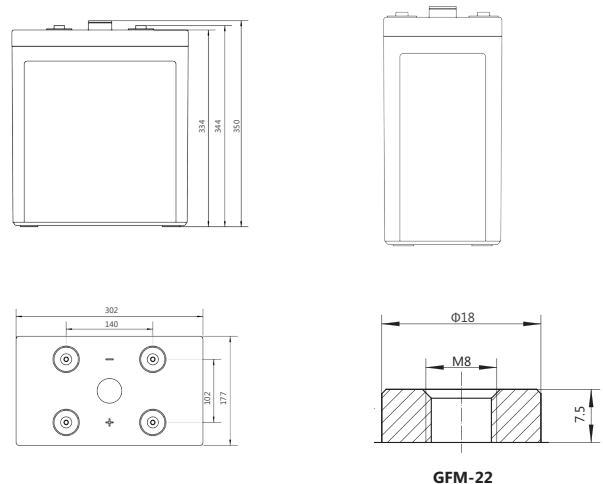
### Applications

- Telecommunications
- Power system
- Energy storage
- UPS
- Emergency power

### Standards

- IEC 60896-21/22
- IEC61427
- DIN43539-T5
- EUROBAT guide

### Drawing



### Specifications

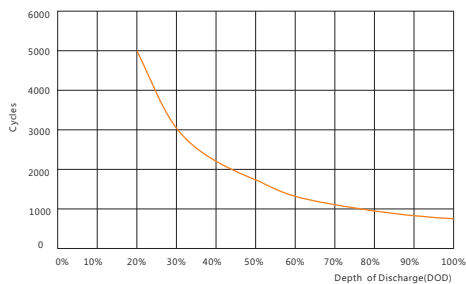
| Battery Model                        | GFMJ-600  |                   |                       |                  |
|--------------------------------------|---|-------------------|-----------------------|------------------|
| Design Life (years, 25°C)            | 18  |                   |                       |                  |
| Capacity (Ah, 25°C)                  | 10HR (60.0A, 1.80V)   | 5HR (105A, 1.80V) | 3HR (153.6A, 1.80V)   | 1HR(336A, 1.80V) |
|                                      | 600   | 525               | 460.8                 | 336              |
| Dimensions (mm)                      | Length  | Width             | Height                | Total Height     |
|                                      | 302   | 177               | 334                   | 344              |
| Approx. Weight (kg)                  | 44.0  |                   |                       |                  |
| Reference Internal Resistance (mΩ)   | 0.33±15% ( full charged @ 25 °C ,testing device:HIOKI BT3562) |                   |                       |                  |
| Maximum Discharge Current (A/3 Sec.) | 3312  |                   |                       |                  |
| Self-Discharge (25°C)                | ≤ 2% per month  |                   |                       |                  |
| Charge Voltage (V/cell, 25°C)        | Cycle use   |                   | Float use             |                  |
|                                      | 2.33 (-3.5mV/°C/cell), max charge current: 120A               |                   | 2.22 (-3.5mV/°C/cell) |                  |
| Short Circuit Current (A)            | 5860  |                   |                       |                  |

## Discharge Data

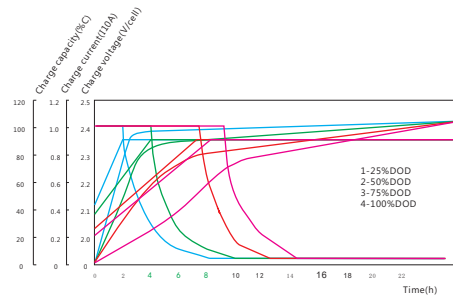
| Constant Current Discharge Data (25°C, A) |      |     |     |     |     |     |       |       |       |       |      |      |      |       |       |      |      |      |
|---|------|-----|-----|-----|-----|-----|-------|-------|-------|-------|------|------|------|-------|-------|------|------|------|
| End Voltage (V/cell)                      | min  |     |     |     |     | h   |       |       |       |       |      |      |      |       |       |      |      |      |
|   | 5    | 10  | 15  | 20  | 30  | 1   | 2     | 3     | 5     | 6     | 8    | 10   | 20   | 24    | 48    | 100  | 120  | 240  |
| 1.65                                      | 1020 | 930 | 864 | 780 | 606 | 375 | 225   | 165   | 114   | 102.0 | 79.8 | 67.5 | 33.9 | 27.72 | 14.58 | 7.50 | 6.54 | 3.48 |
| 1.70                                      | 960  | 885 | 780 | 681 | 570 | 369 | 221.1 | 163.2 | 111.3 | 96.6  | 77.4 | 63.9 | 33.3 | 27.72 | 14.58 | 7.50 | 6.54 | 3.48 |
| 1.75                                      | 900  | 837 | 744 | 657 | 552 | 363 | 216.9 | 160.8 | 109.2 | 95.1  | 75.9 | 62.7 | 33.0 | 27.72 | 14.58 | 7.50 | 6.54 | 3.48 |
| 1.80                                      | 840  | 795 | 687 | 606 | 510 | 336 | 208.2 | 153.6 | 105   | 91.5  | 72.9 | 60.0 | 32.4 | 27.72 | 14.58 | 7.50 | 6.54 | 3.48 |
| 1.85                                      | 720  | 687 | 627 | 567 | 477 | 324 | 195.9 | 144.0 | 98.7  | 85.8  | 68.4 | 56.7 | 30.6 | 26.40 | 14.58 | 7.50 | 6.54 | 3.48 |

| Constant Power Discharge Data (25°C, W/cell) |      |      |      |      |      |     |     |     |     |     |     |      |      |      |       |      |      |      |
|--|------|------|------|------|------|-----|-----|-----|-----|-----|-----|------|------|------|-------|------|------|------|
| End Voltage (V/cell)                         | min  |      |      |      |      | h   |     |     |     |     |     |      |      |      |       |      |      |      |
|  | 5    | 10   | 15   | 20   | 30   | 1   | 2   | 3   | 5   | 6   | 8   | 10   | 20   | 24   | 48    | 100  | 120  | 240  |
| 1.65   | 1782 | 1653 | 1554 | 1413 | 1107 | 696 | 420 | 312 | 216 | 150 | 120 | 99.0 | 50.7 | 48.7 | 29.16 | 15.0 | 13.2 | 7.02 |
| 1.70   | 1707 | 1602 | 1425 | 1254 | 1053 | 690 | 417 | 312 | 213 | 146 | 116 | 95.7 | 50.1 | 48.1 | 29.16 | 15.0 | 13.2 | 7.02 |
| 1.75   | 1641 | 1545 | 1386 | 1230 | 1038 | 687 | 414 | 309 | 210 | 141 | 112 | 92.1 | 49.5 | 47.5 | 29.16 | 15.0 | 13.2 | 7.02 |
| 1.80   | 1569 | 1494 | 1302 | 1149 | 975  | 642 | 405 | 297 | 204 | 136 | 107 | 90.0 | 48.3 | 46.5 | 29.16 | 15.0 | 13.2 | 7.02 |
| 1.85   | 1374 | 1317 | 1206 | 1098 | 927  | 633 | 384 | 282 | 195 | 129 | 102 | 84.9 | 45.9 | 44.5 | 29.16 | 15.0 | 13.2 | 7.02 |

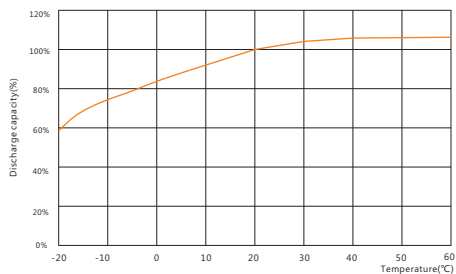
## Performance Curve



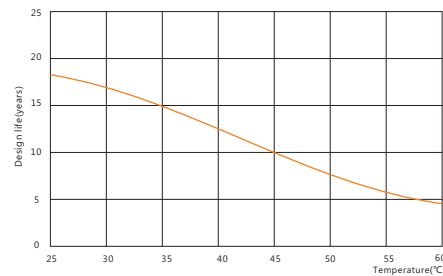
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

### Sacred Sun Power Sources Co., Ltd.

Add: No.1 Shengyang Road, Qufu 273100 PRC  
Tel: +86-537-4422313 Fax: +86-537-4411980  
Email: sales@sacredsun.cn

### Sacred Sun Hong Kong Co., Limited

Add: RM 19C Lockhart CTR 301-307 Lockhart RD Wan Chai, Hong Kong  
Email: admin.hk@sacredsun.hk

### Sacred Sun Asia Pacific Pte Ltd.

Add: 1 Ubi View, #04-12, Focus One, Singapore 408555  
Email: admin.sg@sacredsun.sg

### Sacred Sun Europe SARL

Add: ZAE Fontaine, 33210 Fargues, France  
Email: admin.eu@sacredsun.eu

### Sacred Sun MEA FZE

Add: No. 311 office, Building LOB 14, JAFZA, Dubai, UAE  
Email: admin.ae@sacredsun.ae