

OPzV Series

16 OPzV 2000 2V2000Ah

Sacred Sun OPzV series are valve regulated lead-acid cells which use a combination of tubular positive plate woven gauntlets, pasted negative plate design and gel electrolyte using advanced filling techniques in production which assure superior service life and excellent battery reliability. The battery has excellent cyclic performance and charge acceptance ability. It can be used in high-low temperature environment and poor grid condition.



Benefits

- Very long life according to EUROBAT Classification
- 1500+ cycles at 80% DOD
- High rate discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC or PF micro-porous separator ensures low self-discharge rate
- Optional racking offers easy installation (vertical or horizontal)

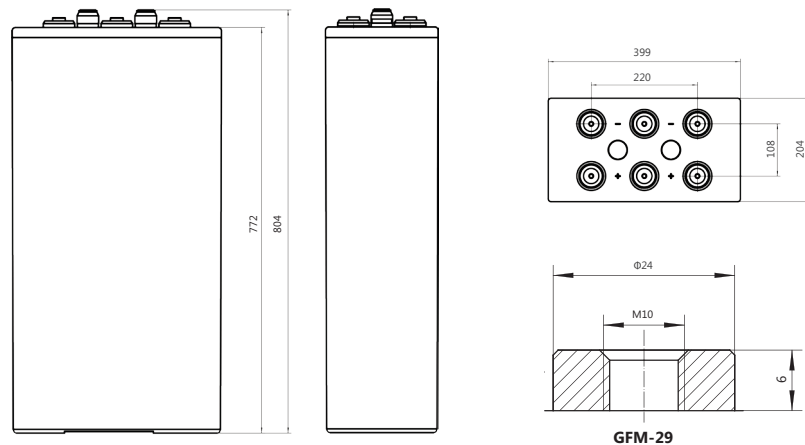
Applications

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

Standards

- IEC 60896-21/22
- IEC 61427
- DIN 43539-T5
- DIN 40742
- EUROBAT guide

Drawing



Specifications

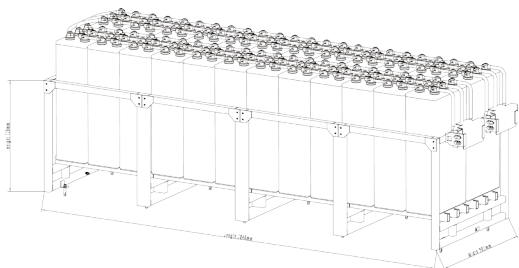
| | | | | |
|--------------------------------------|---|-------------------|-----------------------|--------------------|
| Battery Model | 16 OPzV 2000 | | | |
| Design Life (years, 25°C) | 20 | | | |
| Capacity (Ah, 25°C) | 10HR (200A, 1.80V) | 5HR (340A, 1.80V) | 3HR (500A, 1.80V) | 1HR (1000A, 1.80V) |
| | 2000 | 1700 | 1500 | 1000 |
| Dimensions (mm) | Length | Width | Height | Total Height |
| | 399 | 212 | 772 | 804 |
| Approx. Weight (kg) | 153 | | | |
| Reference Internal Resistance (mΩ) | 0.22 (fully charged @ 25°C) | | | |
| Maximum Discharge Current (A/3 Sec.) | 7659 | | | |
| Self-Discharge (25°C) | ≤ 3% per month | | | |
| Charge Voltage (V/cell, 25°C) | Cycle use | | Float use | |
| | 2.35 (-3.5mV/°C/cell), max charge current: 400A | | 2.25 (-3.5mV/°C/cell) | |
| Short Circuit Current (A) | 12657 | | | |

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 | 2567 | 2295 | 2006 | 1743 | 1479 | 1153 | 753.3 | 588.7 | 405.3 | 343.3 | 265.3 | 226.0 | 118.0 | 99.73 | 54.00 | 26.71 | 22.59 | 11.52 |
| 1.70 | 2405 | 2151 | 1861 | 1665 | 1437 | 1100 | 713.3 | 557.3 | 383.3 | 324.0 | 254.7 | 218.0 | 115.3 | 97.07 | 53.27 | 26.44 | 22.38 | 11.45 |
| 1.75 | 2295 | 2057 | 1819 | 1584 | 1360 | 1053 | 673.3 | 528.0 | 363.3 | 312.0 | 244.7 | 210.0 | 112.0 | 94.87 | 52.60 | 26.12 | 22.18 | 11.38 |
| 1.80 | 2167 | 1955 | 1725 | 1535 | 1309 | 1000 | 636.0 | 500.0 | 340.0 | 290.7 | 235.3 | 200.0 | 108.7 | 93.13 | 52.00 | 25.90 | 21.92 | 11.30 |
| 1.85 | 2040 | 1845 | 1632 | 1460 | 1233 | 953 | 602 | 473.3 | 326.0 | 280.7 | 222.7 | 189.3 | 105.7 | 90.6 | 51.27 | 25.35 | 21.58 | 11.23 |

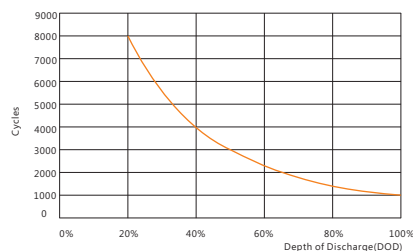
| Constant Power Discharge Data (25°C, W/cell) | | | | | | | | | | | | | | | | | | |
|--|------|------|------|------|------|--------|--------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|
| End Voltage (V/cell) | min | | | | | h | | | | | | | | | | | | |
| | 5 | 10 | 15 | 20 | 30 | 1 | 2 | 3 | 5 | 6 | 8 | 10 | 20 | 24 | 48 | 100 | 120 | 240 |
| 1.65 | 4060 | 3700 | 3328 | 3049 | 2620 | 1975.3 | 1315.0 | 985.0 | 804.8 | 681.0 | 547.6 | 441.4 | 234.8 | 199.00 | 108.00 | 53.60 | 45.20 | 23.08 |
| 1.70 | 3919 | 3550 | 3180 | 2930 | 2550 | 1914.0 | 1265.0 | 950.0 | 776.2 | 657.1 | 528.6 | 436.2 | 230.0 | 194.50 | 106.67 | 52.85 | 44.75 | 22.90 |
| 1.75 | 3700 | 3402 | 3066 | 2830 | 2480 | 1880.0 | 1235.0 | 930.0 | 757.1 | 638.1 | 514.3 | 420.0 | 226.7 | 189.50 | 105.33 | 52.17 | 44.37 | 22.74 |
| 1.80 | 3325 | 3220 | 2960 | 2745 | 2426 | 1830.0 | 1206.7 | 915.0 | 704.8 | 595.2 | 495.2 | 410.0 | 222.4 | 185.70 | 104.00 | 51.80 | 43.90 | 22.59 |
| 1.85 | 3123 | 2933 | 2812 | 2614 | 2281 | 1763.1 | 1155.0 | 875.0 | 642.9 | 566.7 | 459.5 | 387.1 | 215.2 | 181.30 | 102.50 | 50.93 | 43.20 | 22.45 |

Rack Layout

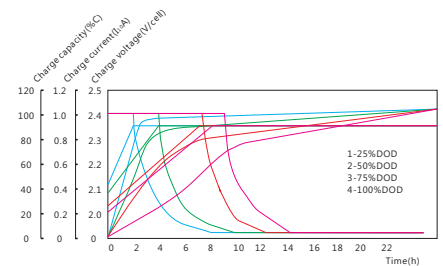


48V Standard Rack
 Rack material: powder-coated steel
 Height*width: 1*2
 Ref. 16 OPzV 2000 Rack (approx. weight: 3900kg)

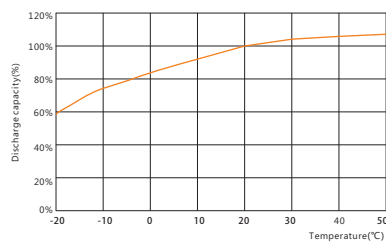
Performance Curve



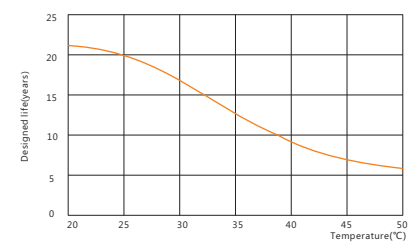
Cycle life vs. discharge depth



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

