

# OPzV Series

## 6V 4 OPzV 200 6V200Ah

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-SiO<sub>2</sub> micro-porous separator ensures low self-discharge rate
- Optional racking offers easy installation (vertical or horizontal)

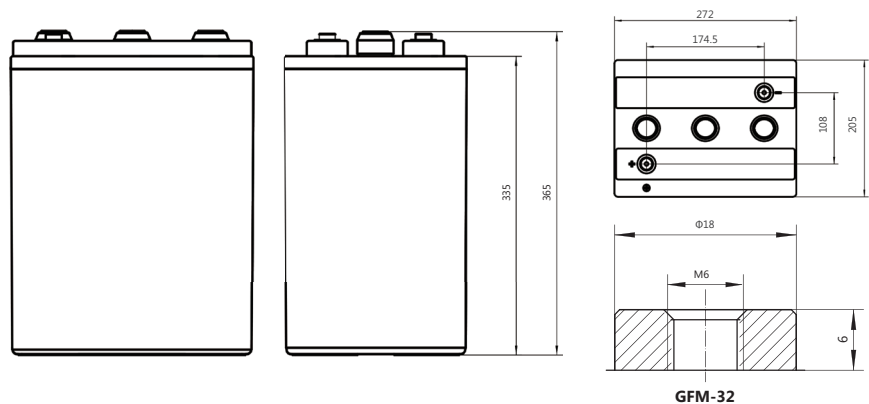
### Applications

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

### Standards

- IEC 60896-21/22
- IEC 61427
- DIN 43539-T5
- DIN 40744
- EUROBAT guide

### Drawing



### Specifications

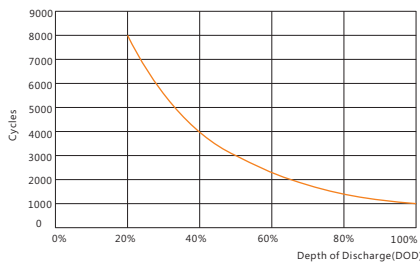
Battery Model	6V 4 OPzV 200			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10HR (20A, 1.80V)	5HR (34A, 1.80V)	3HR (50A, 1.80V)	1HR (100A, 1.80V)
	200	170	150	100
Dimensions (mm)	Length	Width	Height	Total Height
	272	205	335	365
Approx. Weight (kg)	47.5			
Reference Internal Resistance (mΩ)	1.95 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	1190			
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: 40A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	2000			

## Discharge Data

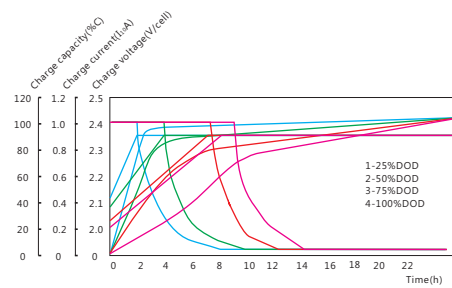
Constant Current Discharge Data (25°C, A)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	302	270	236	206	175	115	75.6	58.9	38.5	33.6	26.5	23.3	12.0	10.26	5.20	2.58	2.18	1.12
1.70	282	254	218	198	169	111	71.1	55.9	37.3	32.7	25.5	21.9	11.6	10.14	5.18	2.54	2.14	1.10
1.75	270	242	214	192	160	105	67.2	52.8	35.7	31.1	24.5	21.1	11.1	10.00	5.16	2.50	2.10	1.07
1.80	254	230	202	180	155	100	63.6	50.0	34.0	29.7	23.5	20.0	10.5	9.86	5.04	2.46	2.06	1.06
1.85	240	218	192	170	145	95	60.3	47.3	32.7	28.8	22.3	19.1	10.2	9.40	4.90	2.40	2.02	1.04

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	500	490	452	420	344	230.0	150.0	118.0	76.8	67.2	53.2	46.6	23.8	20.60	10.40	5.14	4.36	2.24
1.70	464	454	424	384	330	222.0	141.2	112.2	74.4	64.4	50.8	44.0	23.2	20.28	10.36	5.08	4.28	2.18
1.75	424	416	390	360	310	210.0	133.6	110.4	71.2	62.0	49.2	42.0	22.2	20.00	10.30	5.00	4.20	2.14
1.80	384	378	344	316	280	200.0	127.0	99.6	67.6	59.2	46.8	39.8	21.0	19.70	10.06	4.92	4.12	2.10
1.85	370	320	290	274	238	190.0	120.4	94.4	65.2	57.2	44.4	37.2	20.4	18.80	9.78	4.80	4.04	2.06

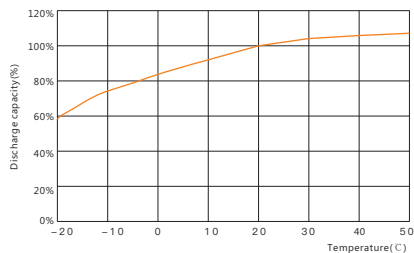
## Performance Curve



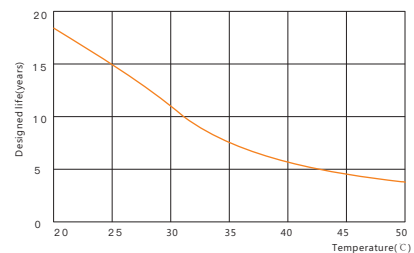
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

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

No.1 Shengyang Road Qufu City, PRC  
sales@sacredsun.cn

### Sacred Sun Asia Pacific

No. 15, Yishun Industrial Street 1,  
#01-17, WIN5, Singapore 768091  
sales.asia@sacredsun.cn

### Sacred Sun Europe SPRL

Paul Dejaerlaan 4b, B 1060 Brussel,  
Belgium  
sales.eu@sacredsun.cn

### Sacred Sun MEA FZE

Jebel Ali, Dubai, UAE  
sales.mea@sacredsun.cn