

# OPzV Series

## 10 OPzV 1000 2V1000Ah

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)

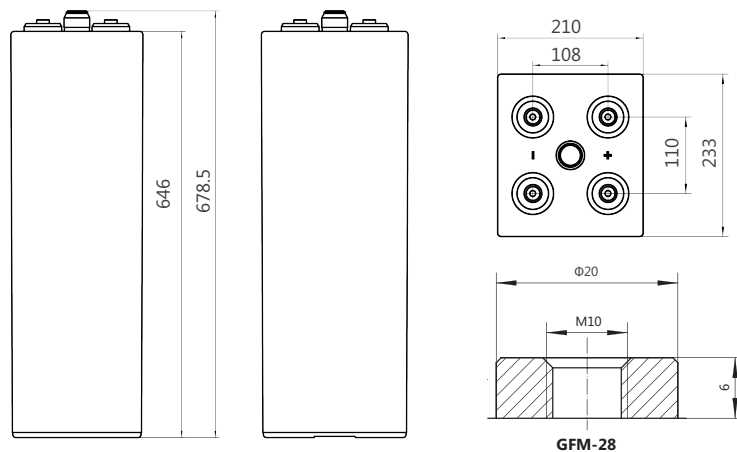
### Drawing

### 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



### Specifications

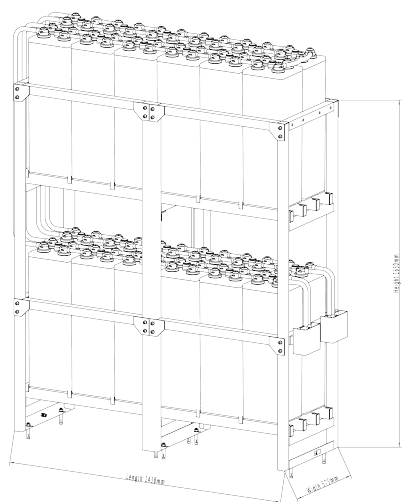
Battery Model	10 OPzV 1000			
Design Life (years, 25°C)	20			
Capacity (Ah, 25°C)	10HR (100A, 1.80V)	5HR (170A, 1.80V)	3HR (250A, 1.80V)	1HR (500A, 1.80V)
	1000	850	750	500
Dimensions (mm)	Length	Width	Height	Total Height
	233	210	646	678.5
Approx. Weight (kg)	73.8			
Reference Internal Resistance (mΩ)	0.34 ±15% (fully charged @ 25°C, Testing device: HIOKIBT3562)			
Maximum Discharge Current (A/3 Sec.)	3905			
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: 200A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	6000			

## 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	1338	1205	1113	1022	840	577	376.7	294.3	202.7	171.7	132.7	113.0	59.2	50.25	26.90	12.97	10.90	5.65
1.70	1282	1117	1038	963	805	550	356.7	278.7	191.7	162.0	127.3	109.0	57.8	49.50	26.63	12.93	10.85	5.63
1.75	1183	1053	972	897	780	527	336.7	264.0	181.7	156.0	122.3	105.0	55.0	48.00	26.30	12.90	10.80	5.60
1.80	1108	995	912	832	710	500	318.0	250.0	170.0	145.3	117.7	100.0	53.5	45.90	26.00	12.85	10.75	5.57
1.85	1028	902	833	755	667	477	301	236.7	163.0	140.3	111.3	94.7	52.2	44.2	25.63	12.78	10.70	5.55

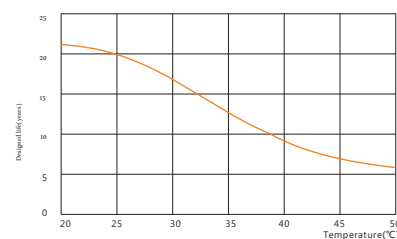
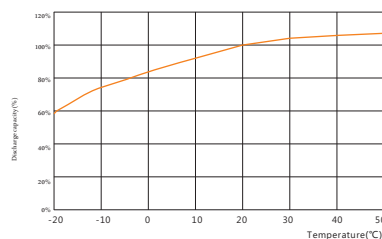
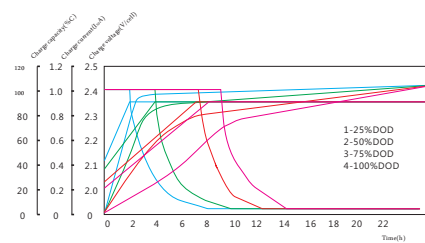
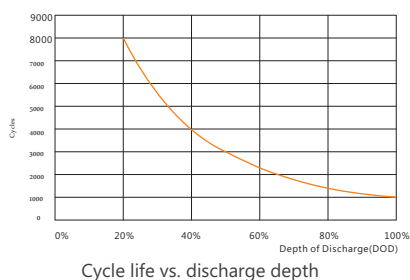
Constant Power Discharge Data (25°C, W/cell)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	2242	2047	1859	1687	1420	987.6	657.5	492.5	402.4	340.5	273.8	220.7	117.4	100.80	54.00	26.17	21.83	11.33
1.70	2153	1966	1771	1617	1360	957.0	632.5	475.0	388.1	328.6	264.3	218.1	115.0	99.33	53.33	25.88	21.70	11.28
1.75	2049	1886	1708	1557	1320	940.0	617.5	465.0	378.6	319.0	257.1	210.0	113.3	95.95	52.67	25.81	21.62	11.20
1.80	1942	1775	1605	1469	1267	915.0	603.3	457.5	352.4	297.6	247.6	205.0	111.2	92.10	52.00	25.69	21.50	11.15
1.85	1826	1581	1440	1307	1140	881.6	577.5	437.5	321.4	283.3	229.8	193.6	107.6	88.70	51.25	25.55	21.43	11.10

## Rack Layout



**48V Standard Rack**  
 Rack material: powder-coated steel  
 Height\*width: 2\*2  
 Ref. 10 OPzV 1000 Rack (approx. weight: 2020kg)

## Performance Curve



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