

# OPzV Series

## 12 OPzV 1200 2V1200Ah

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)

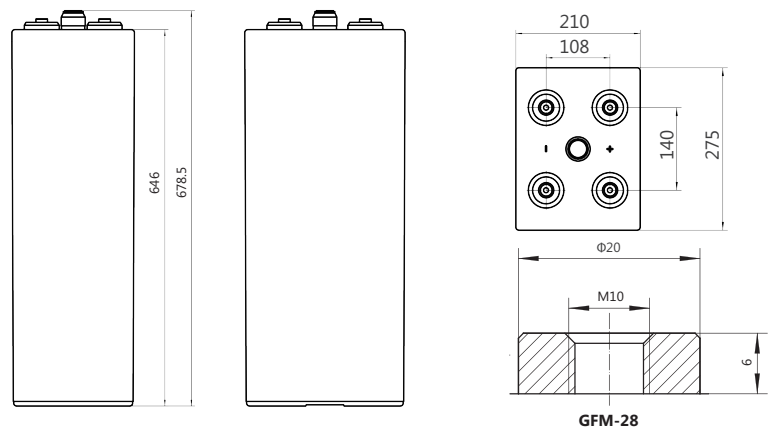
### Drawing

### 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

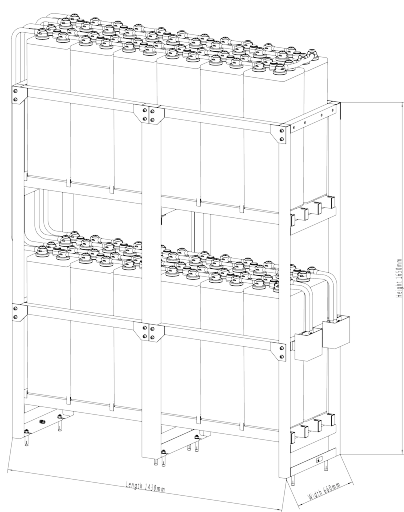
Battery Model	12 OPzV 1200			
Design Life (years, 25°C)	20			
Capacity (Ah, 25°C)	10HR (120A, 1.80V)	5HR (204A, 1.80V)	3HR (300A, 1.80V)	1HR (600A, 1.80V)
	1200	1020	900	600
Dimensions (mm)	Length	Width	Height	Total Height
	275	210	646	678.5
Approx. Weight (kg)	88.0			
Reference Internal Resistance (mΩ)	0.32 ±15% (fully charged @ 25°C, Testing device: HIOKIBT3562)			
Maximum Discharge Current (A/3 Sec.)	4355			
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: 240A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	6400			

## 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	1812	1620	1416	1230	1008	692	452.0	353.2	243.2	206.0	159.2	135.6	71.0	60.30	32.40	15.56	13.08	6.78
1.70	1698	1518	1314	1140	966	660	428.0	334.4	230.0	194.4	152.8	130.8	69.4	59.40	31.96	15.52	13.02	6.76
1.75	1620	1452	1284	1104	936	632	404.0	316.8	218.0	187.2	146.8	126.0	66.0	57.60	31.56	15.48	12.96	6.72
1.80	1530	1380	1218	1020	852	600	381.6	300.0	204.0	174.4	141.2	120.0	64.4	53.88	31.20	15.40	12.90	6.68
1.85	1440	1302	1152	960	800	572	361	284.0	195.6	168.4	133.6	113.6	62.6	53.4	30.76	15.35	12.84	6.66

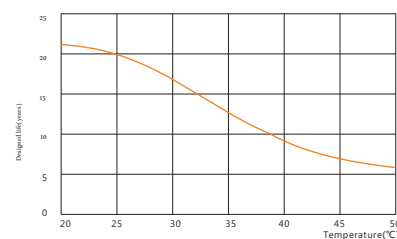
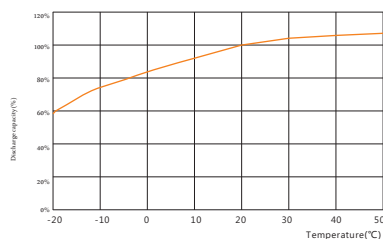
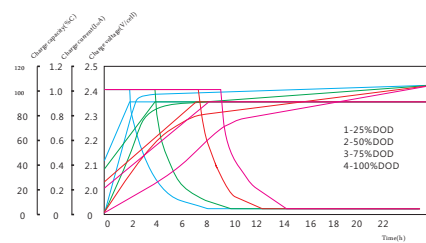
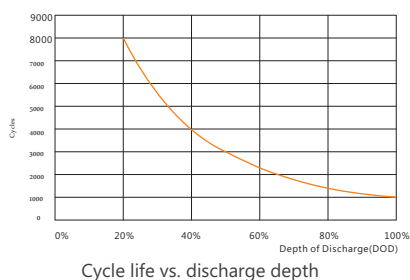
Constant Power Discharge Data (25°C, W/cell)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	2690	2456	2231	2024	1704	1185.2	789.0	591.0	482.8	408.5	328.5	264.9	140.8	120.96	64.80	31.40	26.20	13.60
1.70	2573	2359	2125	1940	1632	1148.4	759.0	570.0	465.7	394.2	317.1	261.7	138.0	119.20	64.00	31.05	26.04	13.53
1.75	2437	2263	2049	1868	1584	1128.0	741.0	558.0	454.2	382.8	308.5	252.0	136.0	115.14	63.20	30.98	25.94	13.44
1.80	2268	2130	1944	1762	1520	1098.0	724.0	549.0	422.8	357.1	297.1	246.0	133.4	108.00	62.40	30.83	25.80	13.38
1.85	2001	1897	1729	1568	1368	1057.9	693.0	525.0	385.7	340.0	275.7	232.3	129.1	106.44	61.50	30.66	25.72	13.32

## Rack Layout



**48V Standard Rack**  
 Rack material: powder-coated steel  
 Height\*width: 2\*2  
 Ref. 12 OPzV 1200 Rack (approx. weight: 2380kg)

## Performance Curve



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