

# OPzV Series

## 15 OPzV 1500 2V1500Ah

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)

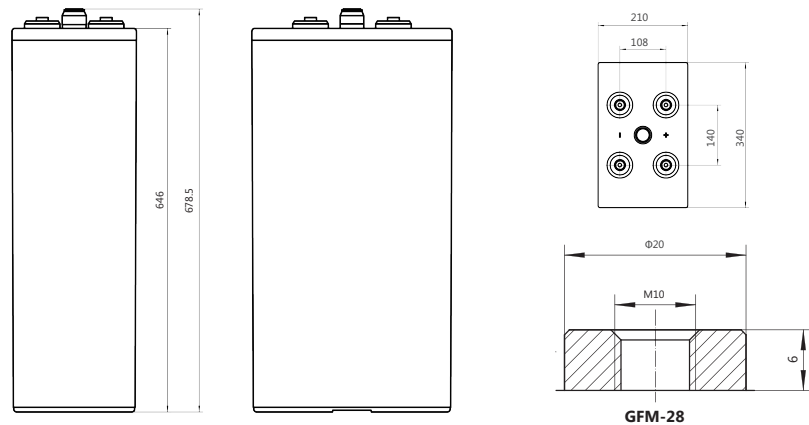
### Drawing

### 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

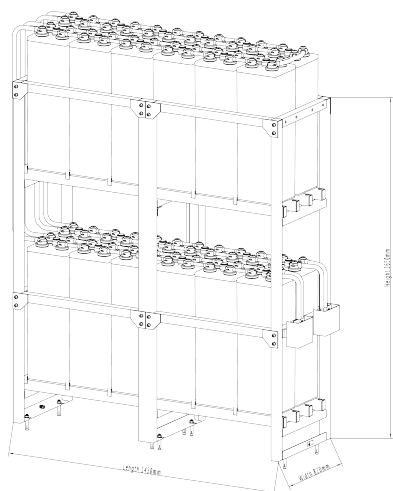
Battery Model	15 OPzV 1500			
Design Life (years, 25°C)	20			
Capacity (Ah, 25°C)	10HR (150A, 1.80V)	5HR (255A, 1.80V)	3HR (375A, 1.80V)	1HR (750A, 1.80V)
	1500	1275	1125	750
Dimensions (mm)	Length	Width	Height	Total Height
	340	210	646	678.5
Approx. Weight (kg)	108.6			
Reference Internal Resistance (mΩ)	0.28 ±15% (fully charged @ 25°C, Testing device: HIOKIBT3562)			
Maximum Discharge Current (A/3 Sec.)	6084			
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: 300A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	7320			

## 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	1925	1721	1505	1307	1109	865	565.0	441.5	304.0	257.5	199.0	169.5	88.8	75.38	40.30	19.45	16.30	8.18
1.70	1804	1613	1396	1211	1078	825	535.0	418.0	287.5	243.0	191.0	163.5	86.8	74.25	39.95	19.40	16.24	8.15
1.75	1721	1543	1364	1173	1020	790	505.0	396.0	272.5	234.0	183.5	157.5	82.5	72.00	39.45	19.35	16.18	8.10
1.80	1625	1466	1294	1114	982	750	477.0	375.0	255.0	218.0	176.5	150.0	80.5	67.95	39.00	19.21	16.07	8.05
1.85	1530	1384	1224	1070	925	715	452	355.0	244.5	210.5	167.0	142.0	78.3	66.7	38.45	19.05	16.02	8.03

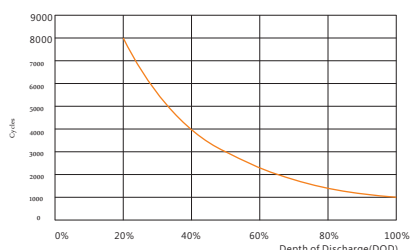
Constant Power Discharge Data (25°C, W/cell)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	3228	2886	2586	2350	2010	1490.0	980.0	738.8	603.6	510.7	410.7	331.1	176.1	151.20	81.00	39.25	32.75	17.00
1.70	3101	2790	2497	2290	1980	1460.0	958.0	722.0	582.1	492.9	396.4	327.1	172.5	149.00	80.00	38.81	32.55	16.91
1.75	2873	2659	2408	2210	1920	1420.0	932.0	702.0	567.9	478.6	385.7	315.0	170.0	144.00	79.00	38.72	32.43	16.80
1.80	2519	2431	2296	2120	1860	1390.0	916.0	696.0	528.6	446.4	371.4	307.5	166.8	135.50	78.00	38.53	32.25	16.73
1.85	2267	2200	2161	1961	1711	1310.0	866.3	656.3	482.1	425.0	344.6	290.4	161.4	133.05	76.88	38.20	32.15	16.65

## Rack Layout

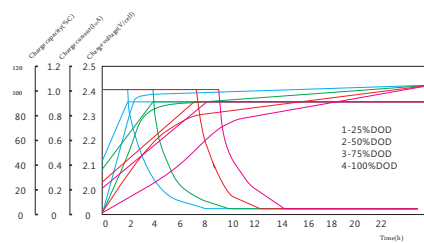


**48V Standard Rack**  
 Rack material: powder-coated steel  
 Height\*width: 2\*2  
 Ref. 15 OPzV 1500 Rack (approx. weight: 2900kg)

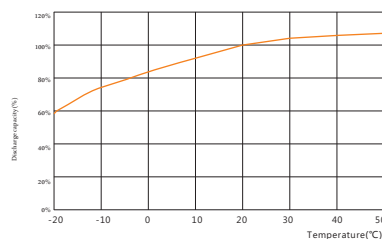
## Performance Curve



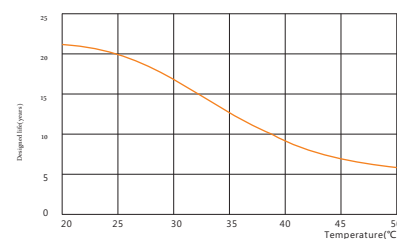
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

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