

# OPzV Series

## 5 OPzV 350 2V350Ah

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

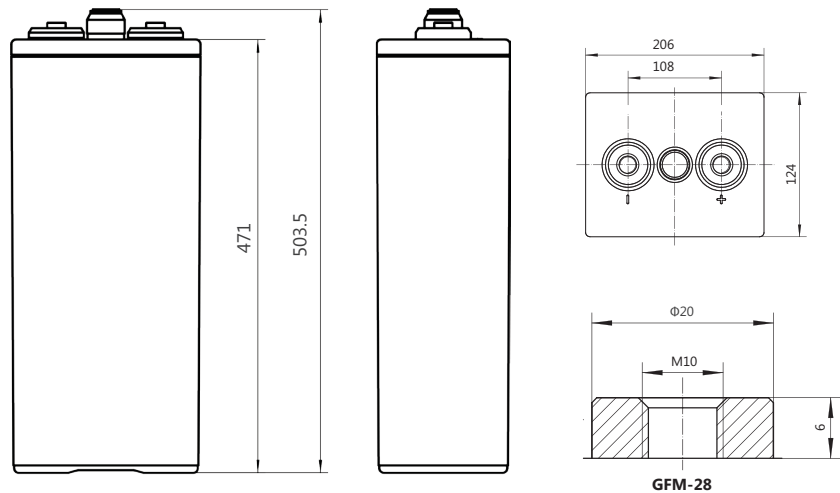
- Very long life according to EUROBAT Classification
- 1500+ cycles at 80% DOD
- High rate discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC or PF micro-porous separator ensures low self-discharge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



### Applications

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

### Drawing



### Standards

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

### Specifications

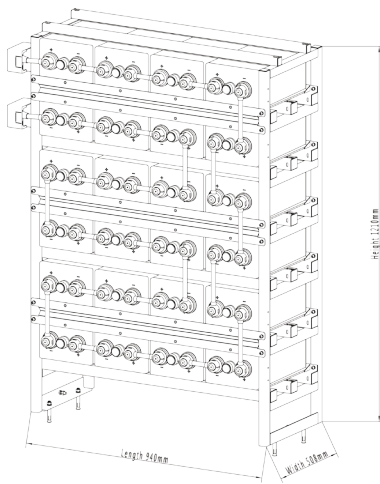
Battery Model	5 OPzV 350			
Design Life (years, 25°C)	20			
Capacity (Ah, 25°C)	10HR (35A, 1.80V)	5HR (59.5A, 1.80V)	3HR (87.5A, 1.80V)	1HR (175A, 1.80V)
	350	297.5	262.5	175
Dimensions (mm)	Length	Width	Height	Total Height
	124	206	471	503.5
Approx. Weight (kg)	27.5			
Reference Internal Resistance (mΩ)	0.58 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	2116			
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: 70A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	3049			

## 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	487	453	413	359	290	202	133.2	103.0	70.9	60.1	45.5	36.7	20.0	17.20	9.45	4.89	4.10	2.10
1.70	450	423	384	341	279	193	129.5	97.5	67.1	56.7	44.6	36.2	19.7	16.74	9.32	4.85	4.07	2.06
1.75	423	404	371	322	261	184	127.0	92.4	63.6	54.6	42.8	35.6	19.4	16.42	9.21	4.80	4.03	2.03
1.80	398	386	356	309	249	175	121.0	87.5	59.5	50.9	41.2	35.0	18.9	16.14	9.10	4.75	3.99	2.01
1.85	381	360	336	293	230	167	115	82.8	57.1	49.1	39.0	34.1	18.3	15.6	8.97	4.67	3.93	1.98

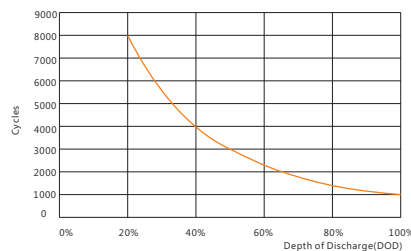
Constant Power Discharge Data (25°C, W/cell)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	864	777	703	632	528	356.5	230.1	172.4	140.8	119.2	95.8	77.3	41.1	34.50	19.00	9.85	8.25	4.25
1.70	822	758	669	615	506	339.5	221.4	166.3	135.8	115.0	92.5	76.3	40.3	33.60	18.60	9.75	8.16	4.15
1.75	752	699	623	566	489	329.3	216.1	162.8	132.5	111.7	90.0	73.5	39.7	33.00	18.45	9.65	8.07	4.08
1.80	694	633	562	514	449	315.7	210.0	160.1	123.3	104.2	86.7	71.8	38.9	32.20	18.20	9.50	8.00	4.02
1.85	639	553	504	458	399	305.6	202.1	153.1	112.5	99.2	80.4	67.8	37.7	31.40	17.95	9.35	7.92	3.97

## Rack Layout

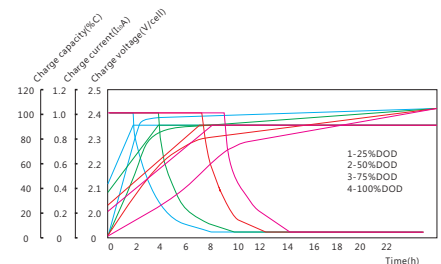


48V Standard Rack (Anti-seismic rack is optional)  
 Rack material: powder-coated steel  
 Height\*width: 6\*4/4\*6 (optional)  
 Ref. 5 OPzV 350 Rack (approx. weight: 740kg)

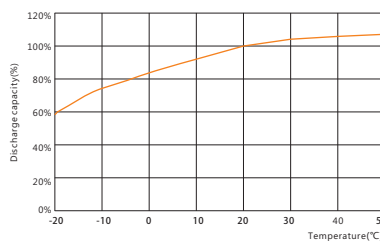
## Performance Curve



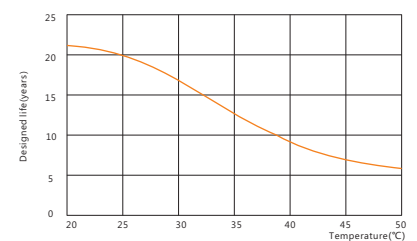
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

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