

# OPzV Series

## 12V 3 OPzV 150 12V150Ah

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
- Vertical installation

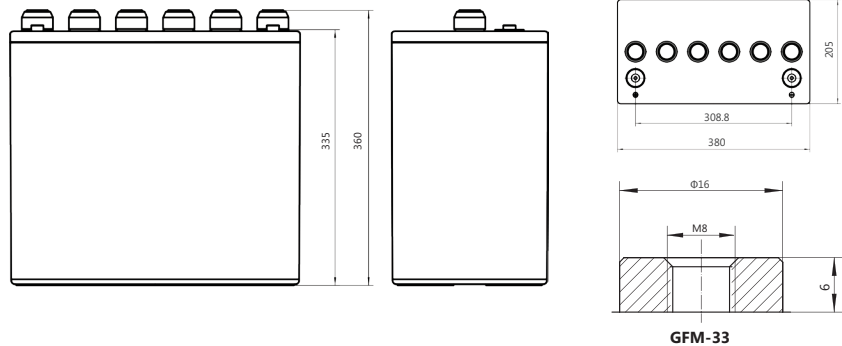
### Applications

- 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

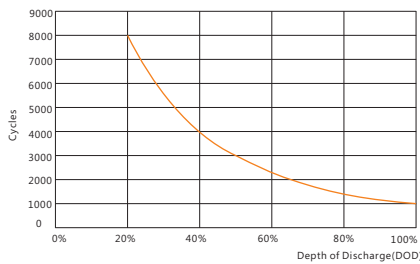
Battery Model	12V 3 OPzV 150			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10HR (15A, 1.80V)	5HR (25.5A, 1.80V)	3HR (37.5A, 1.80V)	1HR (75A, 1.80V)
	150	127.5	112.5	75
Dimensions (mm)	Length	Width	Height	Total Height
	380	205	335	360
Approx. Weight (kg)	70.0			
Reference Internal Resistance (mΩ)	4.83 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	1150			
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: 30A		2.25 (-3.5mV/°C/cell)	
Short Circuit Current (A)	1500			

## Discharge Data

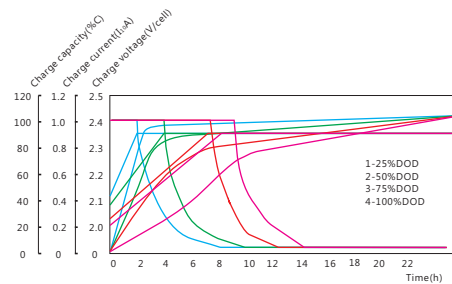
Constant Current Discharge Data (25°C, A)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	227	203	177	155	131	86	56.7	44.2	28.9	25.2	19.9	17.5	9.0	7.70	3.90	1.94	1.64	0.84
1.70	212	191	164	149	127	83	53.3	41.9	28.0	24.5	19.1	16.5	8.7	7.60	3.88	1.91	1.61	0.82
1.75	203	182	161	144	120	79	50.4	39.6	26.8	23.3	18.4	15.8	8.3	7.50	3.84	1.87	1.57	0.80
1.80	191	173	152	135	116	75	47.7	37.5	25.5	22.3	17.6	15.0	7.9	7.40	3.80	1.85	1.55	0.79
1.85	180	164	144	128	109	71	45.2	35.5	24.5	21.6	16.7	14.4	7.6	7.05	3.68	1.83	1.52	0.78

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	375	368	339	315	258	172.5	112.5	88.5	57.6	50.4	39.9	35.0	17.9	15.45	7.80	3.86	3.27	1.68
1.70	348	341	318	288	248	166.5	105.9	84.2	55.8	48.3	38.1	33.0	17.4	15.21	7.77	3.81	3.21	1.64
1.75	318	312	293	270	233	157.5	100.2	82.8	53.4	46.5	36.9	31.5	16.7	15.00	7.73	3.75	3.13	1.61
1.80	288	284	258	237	210	150.0	95.3	74.7	50.7	44.4	35.1	29.9	15.8	14.78	7.58	3.69	3.09	1.59
1.85	278	240	218	206	179	142.5	90.3	70.8	48.9	42.9	33.3	27.9	15.3	14.10	7.34	3.65	3.03	1.56

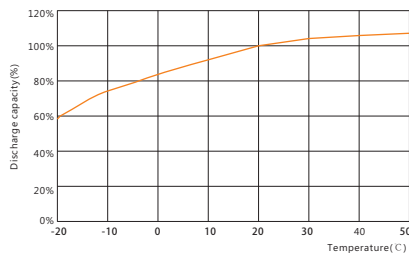
## Performance Curve



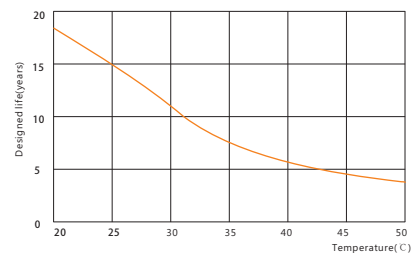
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

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