

GFMJ Series

GFMJ-500 2V500Ah

GFMJ series gel batteries utilize advanced battery manufacturing technology. It has good cyclic and high-low temperature performance, special electrolyte design and good charge acceptance ability. GFMJ can be used in high-low temperature environment with poor grid condition. It is optimal for pure cyclic solar, wind and energy storage systems.



Benefits

- Very long life according to EUROBAT Classification
- High discharge performance
- High gas recombination efficiency
- Maximum charge efficiency
- GEL state electrolyte prevents leakage and layering
- Low resistance PVC-SiO₂ micro-porous separator ensure Low self-discharge rate
- Easy installation and handling

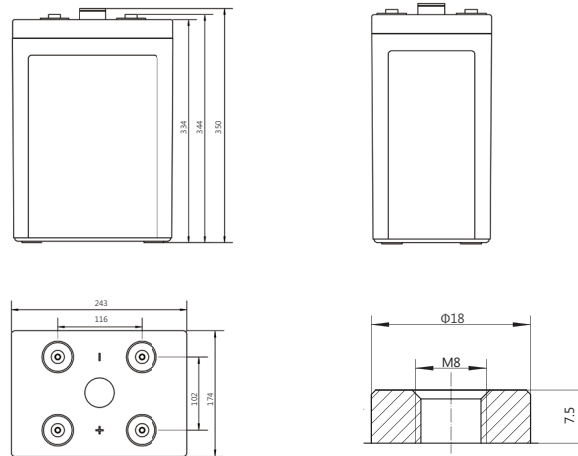
Applications

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

Standards

- IEC 60896-21/22
- IEC61427
- DIN43539-T5
- EUROBAT guide

Drawing



Specifications

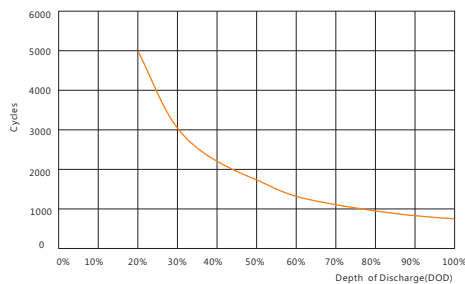
Battery Model	GFMJ-500			
Design Life (years, 25°C)	18			
Capacity (Ah, 25°C)	10HR (50.0A, 1.80V)	5HR (87.5A, 1.80V)	3HR (128A, 1.80V)	1HR(280A, 1.80V)
	500	437.5	384	280
Dimensions (mm)	Length	Width	Height	Total Height
	243	174	334	344
Approx. Weight (kg)	35.5			
Reference Internal Resistance (mΩ)	0.39 (fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	2944			
Self-Discharge (25°C)	≤ 2% per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.33 (-3.5mV/°C/cell), max charge current: 100A		2.22 (-3.5mV/°C/cell)	
Short Circuit Current (A)	5020			

Discharge Data

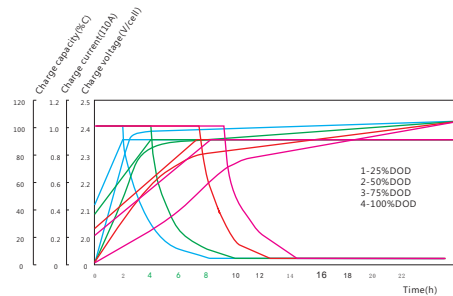
Constant Current Discharge Data (25°C, A)																		
End Voltage (V/cell)	min					h												
	5	10	15	20	30	1	2	3	5	6	8	10	20	24	48	100	120	240
1.65	850	775	720	650	505	312	187.5	137	95.0	85	66.5	56.25	28.25	23.75	12.15	6.25	5.45	2.90
1.70	800	737	650	567	475	307	184.3	136	92.8	80.5	64.5	53.25	27.75	23.30	12.15	6.25	5.45	2.90
1.75	750	697	620	54	460	302	180.8	134	91.0	79.3	63.25	52.25	27.5	23.10	12.15	6.25	5.45	2.90
1.80	700	662	572	505	425	280	173.5	128	87.5	76.3	60.75	50.0	27.0	23.10	12.15	6.25	5.45	2.90
1.85	600	572	522	472	397	270	163.3	120	82.2	71.5	57.0	47.25	25.5	22.0	12.15	6.25	5.45	2.90

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	1485	1377.5	1295	1177.5	922.5	580	350	260	180	125.3	100	82.5	42.3	39.8	24.3	12.5	11	5.85
1.70	1422.5	1335	1187.5	1045	877.5	575	347	260	177	121.5	96.3	79.8	41.8	39.4	24.3	12.5	11	5.85
1.75	1367.5	1287.5	1155	1025	865	572	345	257	175	117.3	93	76.8	41.3	39	24.3	12.5	11	5.85
1.80	1307.5	1245	1085	957.5	812.5	535	337	247	170	113	89.5	75	40.3	38.6	24.3	12.5	11	5.85
1.85	1145	1097.5	1005	915	772.5	527	320	235	162	107.3	85.3	70.8	38.3	36.9	24.3	12.5	11	5.85

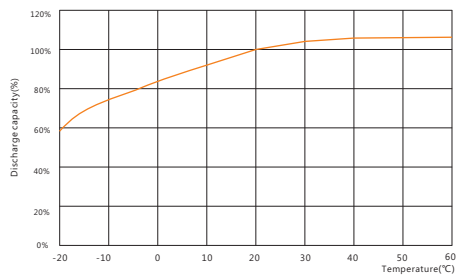
Performance Curve



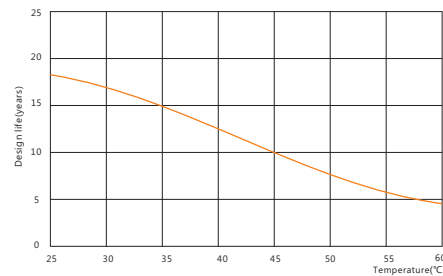
Cycle life vs. discharge depth



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

Sacred Sun Power Sources Co., Ltd.

No.1 Shengyang Road Qufu City, PRC
sales@sacredsun.cn

Sacred Sun Asia Pacific

No. 15, Yishun Industrial Street 1,
#01-17, WIN5, Singapore 768091
sales.asia@sacredsun.cn

Sacred Sun Europe SPRL

Schoenstraat 96-9140 Temse, Belgium
sales.eu@sacredsun.cn

Sacred Sun MEA FZE

S10122A1019 Jebel Ali, Dubai,
United Arab Emirates
sales.mea@sacredsun.cn