

# FMJ Series

## 6FMJ-50 12V50Ah

FMJ series gel batteries utilize advanced battery technology. FMJ has good cyclic performance and high reliability. It is the economical choice for solar photovoltaic street lights, garden and lawn lamps, traffic lights, warning lights and other energy storage systems.



### Benefits

- 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-SiO<sub>2</sub> micro-porous separator ensure Low self-discharge rate
- Easy installation and handling

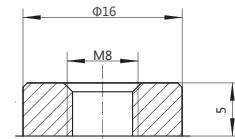
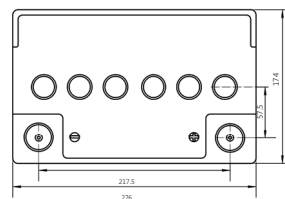
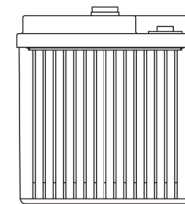
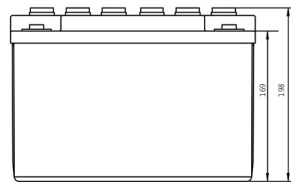
### Applications

- Telecommunications
- Emergency power
- Energy storage systems
- UPS units
- Electrical Power plants and substation

### Standards

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

### Drawing



GFM-24

### Specifications

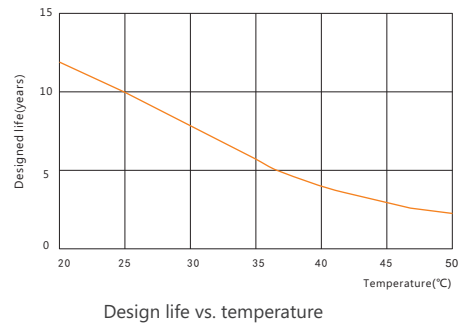
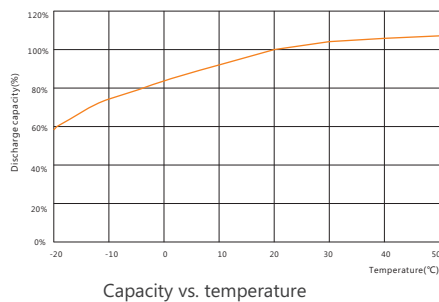
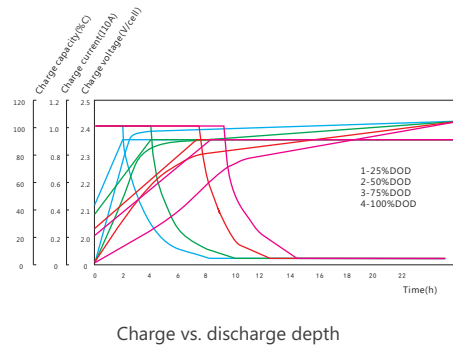
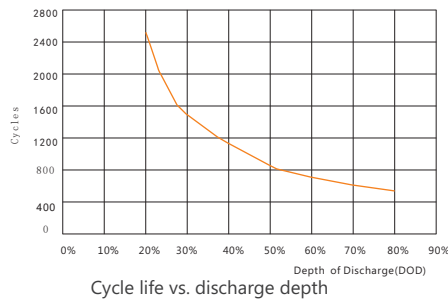
Battery Model	6FMJ-50			
Design Life (years, 25°C)	10			
Capacity (Ah, 25°C)	10HR (5.0A, 1.80V)	5HR (8.5A, 1.80V)	3HR (12.5A, 1.80V)	1HR(27.5A, 1.80V)
	50	42.5	37.5	27.5
Dimensions (mm)	Length	Width	Height	Total Height
	276	174	169	198
Approx. Weight (kg)	21.0			
Reference Internal Resistance (mΩ)	7.64 ( fully charged @ 25°C)			
Maximum Discharge Current (A/3 Sec.)	718			
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: 10 A		2.22 (-3.5mV/°C/cell)	
Short Circuit Current (A)	1525			

## Discharge Data

Constant Current Discharge Data (25°C, A)																		
End Voltage (V/cell)	min						h											
	5	10	15	20	30	45	1	1.5	2	3	5	10	20	24	48	100	120	240
1.65	140	102	79	67	49	38	28.9	22.5	17.2	13.10	8.80	5.00	2.70	2.31	1.22	0.63	0.55	0.29
1.70	133	98	78	66	48	37	28.4	22.2	17.2	13.10	8.80	5.00	2.70	2.31	1.22	0.63	0.55	0.29
1.75	125	93	76	64	48	36	28.4	21.8	17.2	13.10	8.80	5.00	2.70	2.31	1.22	0.63	0.55	0.29
1.80	116	87	74	61	46	35	27.9	21.5	17.2	13.10	8.80	5.00	2.70	2.31	1.22	0.63	0.55	0.29
1.85	99	79	69	57	44	34	27.5	20.9	16.7	12.50	8.50	5.00	2.60	2.20	1.22	0.63	0.55	0.29

Constant Power Discharge Data (25°C, W/cell)																		
End Voltage (V/cell)	min						h											
	5	10	15	20	30	45	1	1.5	2	3	5	10	20	24	48	100	120	240
1.65	247	185	145	122	91	69	53.4	41.5	32.5	23.60	16.10	9.50	5.10	4.58	2.43	1.25	1.10	0.59
1.70	229	178	142	120	90	68	52.5	41.2	32.5	23.60	16.10	9.40	5.10	4.58	2.43	1.25	1.10	0.59
1.75	210	168	137	118	89	67	52.5	40.8	32.5	23.60	16.10	9.40	5.10	4.58	2.43	1.25	1.10	0.59
1.80	193	156	133	113	87	66	51.5	40.4	32.5	23.60	16.10	9.30	5.10	4.58	2.43	1.25	1.10	0.59
1.85	180	142	127	106	83	63	50.8	39.5	31.7	23.00	15.30	9.10	5.00	4.40	2.43	1.25	1.10	0.59

## Performance Curve



### 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