ALPHA HOUSE powered by SACRED SUN

FMJ Series

6FMJ-85 (12V85Ah)

FMJ series gel batteries utilise 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 or PF micro-porous separator ensure low self-discharge rate
- Easy installation and handling

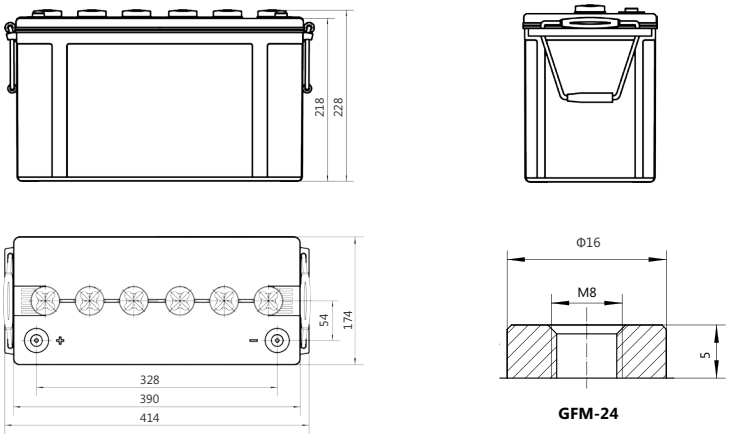
Applications

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

Standards

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

Drawing



Specifications

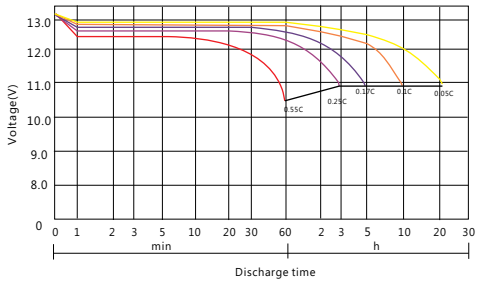
Battery Model	6FMJ-85			
Design Life (years, 25℃)	15			
Capacity (Ah, 25℃)	10HR (8.5A, 1.80V)	5HR (14.45A, 1.80V)	3HR (21.25A, 1.80V)	1HR(45.76A, 1.80V)
	85	72.25	63.75	45.76
Dimensions (mm)	Length	Width	Height	Total Height
	414	174	218	228
Approx. Weight (kg)	34.0			
Reference Internal Resistance (mΩ)	5.19 (fully charged @ 25℃)			
Maximum Discharge Current (A/3 Sec.)	1012			
Self-Discharge (25℃)	⩽2% per month			
Charge Voltage (V/cell, 25℃)	Cycle use		Float use	
	2.33 (-3.5mV/℃/cell), max charge current: 17A		2.22 (-3.5mV/℃/cell)	
Short Circuit Current (A)	2060			

Discharge Data

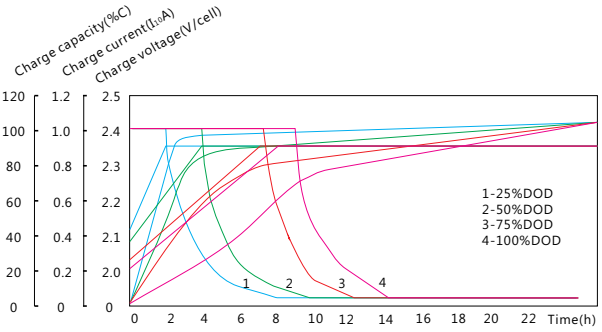
Constant Current Discharge Data (25℃, A)																		
End Voltage (V/cell)	min			h														
	15	30	45	1	1.5	2	3	4	5	6	8	10	20	24	48	100	120	240
1.60	133	84.96	59.30	50.12	38.17	29.80	23.26	18.62	15.83	14.42	11.17	9.308	4.794	4.046	2.015	0.969	0.927	0.485
1.65	129	83.26	58.11	49.11	37.41	29.21	22.80	18.24	15.50	14.14	10.95	9.121	4.692	3.970	1.972	0.961	0.918	0.476
1.70	125	81.60	56.95	48.14	36.66	28.65	22.31	17.88	15.20	13.86	10.73	8.934	4.599	3.893	1.947	0.952	0.910	0.468
1.75	121	79.97	55.73	47.18	35.92	28.05	21.86	17.53	14.88	13.57	10.51	8.755	4.514	3.817	1.913	0.944	0.901	0.459
1.80	115	77.56	54.14	45.76	34.85	27.21	21.25	17.00	14.45	13.18	10.20	8.500	4.420	3.740	1.887	0.935	0.893	0.451

Constant Power Discharge Data (25℃, W/cell)																		
End Voltage (V/cell)	min			h														
	15	30	45	1	1.5	2	3	4	5	6	8	10	20	24	48	100	120	240
1.60	231	149	104	88.20	67.17	52.45	41.63	33.88	28.96	26.24	20.55	17.31	9.204	7.849	3.948	1.928	1.853	0.979
1.65	226	147	103	87.42	66.96	52.28	41.49	33.56	28.68	26.15	20.36	17.24	9.102	7.780	3.905	1.921	1.845	0.966
1.70	222	146	102	86.64	66.36	52.13	41.06	33.07	28.42	26.05	20.27	17.15	9.013	7.747	3.874	1.914	1.837	0.954
1.75	219	146	101	85.86	66.09	51.89	40.66	32.78	28.11	25.93	20.19	17.07	8.892	7.633	3.825	1.906	1.829	0.941
1.80	214	143	100	85.11	65.52	51.70	40.38	32.47	27.89	25.69	19.99	16.83	8.840	7.517	3.793	1.898	1.821	0.928

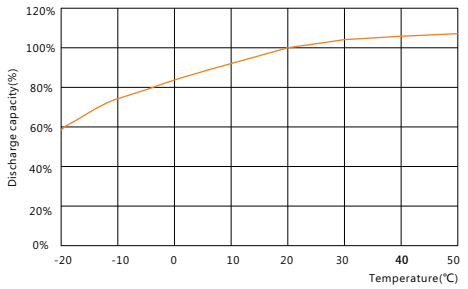
Performance Curve



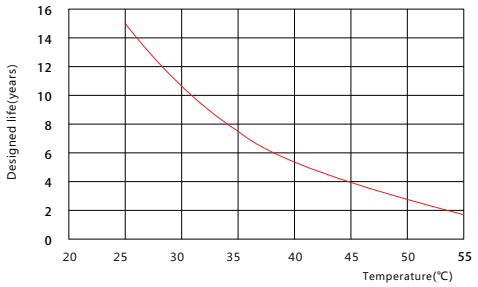
Discharge voltage vs. discharge time



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

ISO9001 CEPREI ISO14001 CEPREI ISO18001 SA8000 Pb