

# FMJ Series

## 6FMJ-100 12V100Ah

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 or PF micro-porous separator ensure low self-discharge rate
- Easy installation and handling

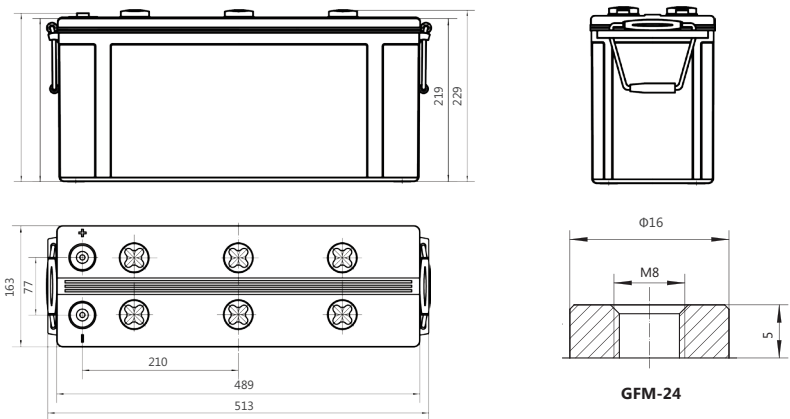
### Applications

- 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

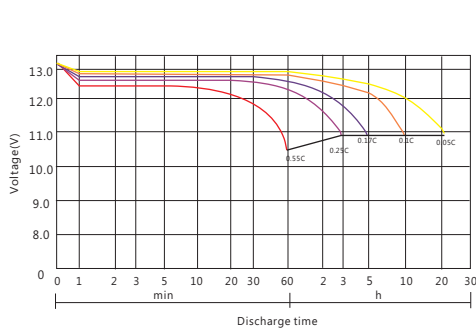
Battery Model	6FMJ-100			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	10HR (10A, 1.80V)	5HR (17A, 1.80V)	3HR (25A, 1.80V)	1HR(53.8A, 1.80V)
	100	85	75	53.8
Dimensions (mm)	Length	Width	Height	Total Height
	513	163	219	229
Approx. Weight (kg)	40.0			
Reference Internal Resistance (mΩ)	4.2±15% ( full charged @ 25°C, testing device:HIOKI BT3562)			
Maximum Discharge Current (A/3 Sec.)	1104			
Self-Discharge (25°C)	< 3 % per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.33 (-3.5mV/°C/cell), max charge current: 20A		2.23 (-3.5mV/°C/cell)	
Short Circuit Current (A)	2420			

## Discharge Data

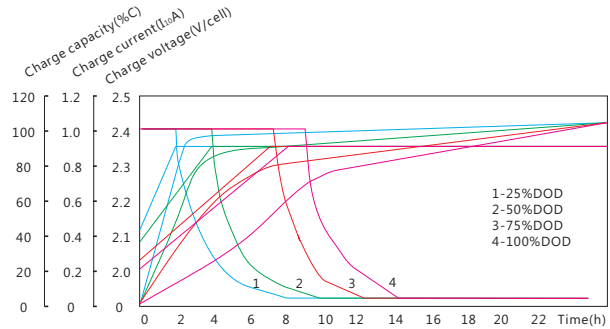
Constant Current Discharge Data (25°C, A)																		
End Voltage (V/cell)	min			h														
	15	30	45	1	1.5	2	3	4	5	6	8	10	20	24	48	100	120	240
1.60	156	100	69.8	59.0	44.9	35.1	27.4	21.9	18.6	17.0	13.1	11.0	5.64	4.76	2.37	1.14	1.09	0.57
1.65	151	98.0	68.4	57.8	44.0	34.4	26.8	21.5	18.2	16.6	12.9	10.7	5.52	4.67	2.32	1.13	1.08	0.56
1.70	147	96.0	67.0	56.6	43.1	33.7	26.3	21.0	17.9	16.3	12.6	10.5	5.41	4.58	2.29	1.12	1.07	0.55
1.75	142	94.1	65.6	55.5	42.3	33.0	25.7	20.6	17.5	16.0	12.4	10.3	5.31	4.49	2.25	1.11	1.06	0.54
1.80	135	91.3	63.7	53.8	41.0	32.0	25.0	20.0	17.0	15.5	12.0	10.0	5.20	4.40	2.22	1.10	1.05	0.53

Constant Power Discharge Data (25°C, 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	271	175	122	104	79.0	61.7	49.0	39.9	34.1	30.9	24.2	20.4	10.8	9.23	4.65	2.27	2.18	1.15
1.65	266	173	121	103	78.8	61.5	48.8	39.5	33.7	30.8	24.0	20.3	10.7	9.15	4.59	2.26	2.17	1.14
1.70	261	172	120	102	78.1	61.3	48.3	38.9	33.4	30.6	23.9	20.2	10.6	9.11	4.56	2.25	2.16	1.12
1.75	258	171	119	101	77.8	61.1	47.8	38.6	33.1	30.5	23.8	20.1	10.5	8.98	4.50	2.24	2.15	1.11
1.80	252	169	118	100	77.1	60.8	47.5	38.2	32.8	30.2	23.5	19.8	10.4	8.84	4.46	2.23	2.14	1.09

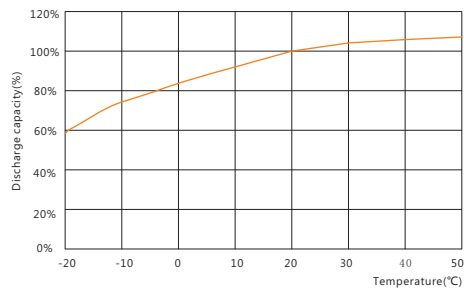
## Performance Curve



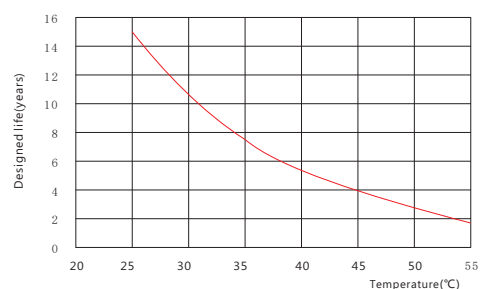
Discharge voltage vs. discharge time



Charge vs. discharge depth



Capacity vs. temperature



Design life vs. temperature

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