# **6-GFMJ Series**

12V Gel Battery 6-GFMJ-80







- ▶ Telecom, energy storage
- ▶ High-precision equipment backup power supply
- Data center
- UPS

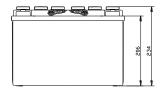


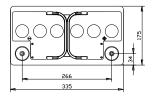
#### **Benefits**

- Designed life of 15 years
- High cycle service life
- Adapt to a wider temperature range
- Excellent deep cycle performance and high rate discharge performance
- ▶ Better charging acceptance
- Better safety and reliability
- Environmental protection and energy saving

Nominal Voltage	12 V				
Capacity	80 Ah @ 10hr to 1.80V per cell @ 25°C(77°F)				
Weight	32.5 kg(71.7 lbs)				
	Length:335 mm (13.19 in)				
Dimensions	Width: 175 mm (6.89 in)				
	Height: 234 mm (9.21 in)				
Internal Resistance (full charged)	4.33mΩ				
Short- circuit current	2771A				
Self Discharge @ 25°C (77°F)	Less than 20% after 180 days storage				
	Discharge: -20°C ~ 50°C(-4°F ~ 122°F)				
Operating Temperature Range	Charge: 5°C~40°C(41°F~104°F)				
	Storage: 20°C~30°C(68°F~86°F)				
Recommended Operating Temperature	15°C ~ 25°C(59°F ~ 77°F)				
Recommended Charging Current	12A				
	Float: 2.25 V/cell				
Charging Voltage @25°C(77°F)	Equalize: 2.35 V/cell				
	Temperature compensation coefficient: -3mV/cell•°C				
Terminal	M8				
Container Material	ABS/ABS V0 (Optional)				
Consoity Affactad by	106% @ 40°C(104°F)				
Capacity Affected by	80% @ 0°C(32°F)				
Temperature(C10)	60% @ -20°C(-4°F)				
Design life @ 25°C (77°F)	15 years				

#### **Dimensions**





## Certification

- ☑ ISO 9001:2008
- ☑ ISO 14001:2004
- ☑ GB/T 28001-2014
- ☑ UL
- ☑ CE

### **Technical Features**

- Electrolyte: The main material is made of fumed silica and made by special process.
- Battery cover: ABS material, corrosion-resistant, high-strength, hotmelt sealing of the groove cover, no potential leakage risk, structural design resistant to high temperature deformation.
- Separator: Special microporous separator, high porosity, low electrical resistance, and greater electrolyte storage space.
- Terminal seal: The embedded copper core lead-based pole has greater current carrying capacity and corrosion resistance. The unique double seal structure effectively prevents leakage.
- Safety valve: The opening and closing valve has a constant pressure and high reliability, avoiding the expansion and rupture of the battery casing and the drying of the electrolyte.

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## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.9	40.0	28	23.3	18.5	13	11.6	9.2	7.6	3.87	0.88	0.74
1.85	42.7	31.2	25.8	19.0	14.4	12.9	9.6	8.0	4.25	0.94	0.80
1.8	45.0	32.8	27.2	19.5	15.2	13.6	9.7	8.1	4.46	0.98	0.82
1.75	47.2	34.4	28.6	21.0	16	14.3	10.1	8.4	4.63	1.01	0.83

## Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

F.V/Time	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.9	77.0	55.0	45.8	35.3	25.5	22.8	18.0	14.8	7.7	1.77	1.48
1.85	80.0	60.3	49.8	36.3	27.8	25.0	18.2	15.0	8.0	1.85	1.58
1.8	82.7	61.2	50.8	37.2	28.3	25.3	18.3	15.2	8.2	1.90	1.59
1.75	84.8	62.0	51.5	37.8	28.8	25.7	18.5	15.5	8.3	1.92	1.60

### **Performance Curve**

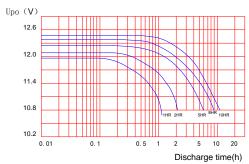


Figure 1 Discharge characteristic curve (20°C)

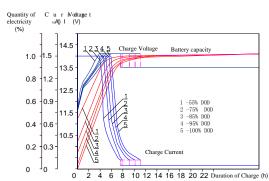


Figure 2 Constant voltage charge characteristic curve

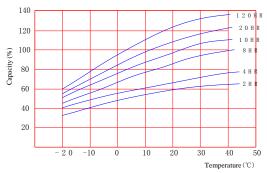


Figure 3 Relation curves between capacity and temperature

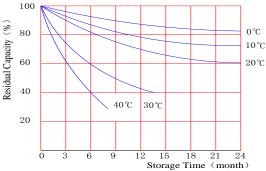


Figure 4 Self-discharge characteristic curve