6-GFMJ Series

12V Gel Battery

6-GFMJ-65

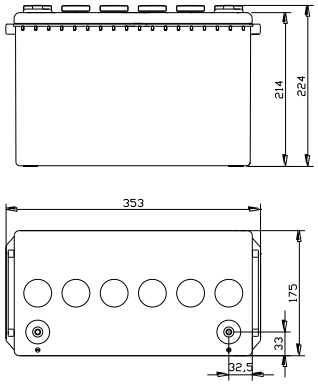
Main Applications

- 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

Dimensions



Certification

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

Nominal Voltage	12 V
Capacity	65Ah @ 10hr to 1.80V per cell @ 25°C(77°F)
Weight	29 kg(63.9 lbs)
Dimensions	Length:353 mm (13.90 in) Width: 175 mm (6.89 in) Height: 224 mm (8.82 in)
Internal Resistance (full charged)	5.6mΩ
Short- circuit current	2143A
Self Discharge @ 25°C (77°F)	Less than 20% after 180 days storage
Operating Temperature Range	Discharge: -20°C~50°C(-4°F~122°F) 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	9.8A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell Equalize: 2.35 V/cell Temperature compensation coefficient: -3mV/cell•°C
Terminal	M8
Container Material	ABS/ABS V0 (Optional)
Capacity Affected by Temperature(C10)	106% @ 40°C(104°F) 80% @ 0°C(32°F) 60% @ -20°C(-4°F)
Design life @ 25°C (77°F)	15 years

Technical Features

- Electrolyte: The main material is made of fumed silica and made by special process.
- Battery cover: ABS material, corrosion-resistant, high-strength, hot-melt 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.

6-GFMJ Series

12V Gel Battery

6-GFMJ-65

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	32.5	22.8	18.9	15	10.6	9.7	7.5	6.2	3.08	0.72	0.6
1.85	34.7	25.3	21	16	11.7	10.7	7.8	6.5	3.38	0.77	0.65
1.8	36.5	26.7	22.1	16.2	12.4	11.3	7.9	6.6	3.54	0.79	0.66
1.75	38.4	28	23.2	17.6	13	11.9	8	6.8	3.68	0.82	0.68

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	62.7	44.8	37.2	28.7	20.8	19.0	13.8	11.8	6.0	1.44	1.20
1.85	65.0	48.8	40.7	29.3	22.7	20.7	14.7	12.5	6.5	1.51	1.28
1.8	67.2	49.8	41.3	30.2	23.2	21.2	14.8	12.7	6.8	1.54	1.29
1.75	68.8	50.3	41.8	31.7	23.3	21.5	15.0	12.8	7.0	1.56	1.30

Performance Curve

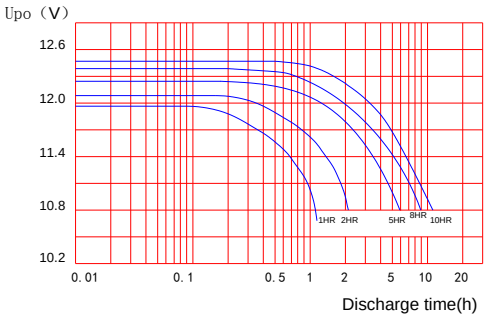


Figure 1 Discharge characteristic curve (20℃)

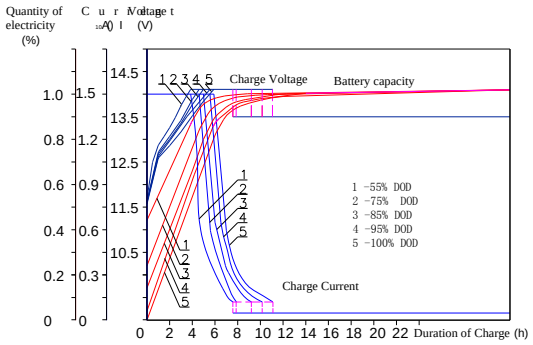


Figure 2 Constant voltage charge characteristic curve

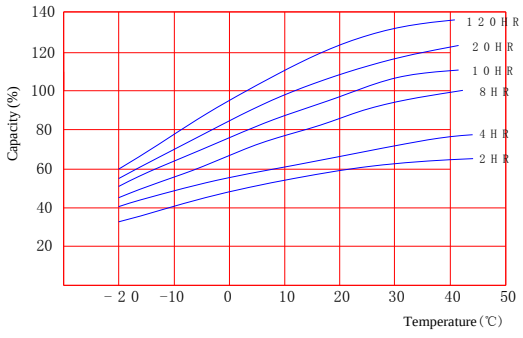


Figure 3 Relation curves between capacity and temperature

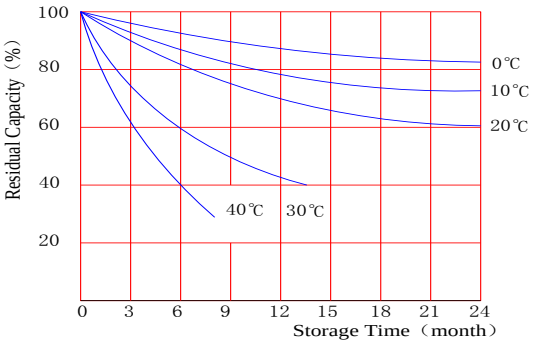


Figure 4 Self-discharge characteristic curve