

# 6-GFM Series

Valve-Regulated Lead-Acid Battery  
6-GFM-65



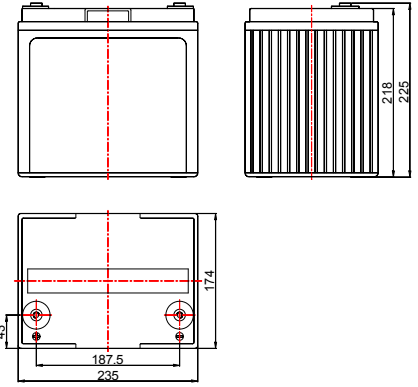
## Main Applications

- ▶ Backup power for telecom and signal system
- ▶ Military field, railway system, power system
- ▶ UPS & emergency lighting system
- ▶ Fire alarm and security system

## Benefits

- ▶ 10 years design life
- ▶ Safely and reliably sealed
- ▶ High energy density, low internal resistance and low discharge rate
- ▶ Excellent charging acceptability and high sealed reaction efficiency

## Dimensions :



## Technical Parameters

Nominal Voltage	12 V
Capacity	65Ah @ 10hr to 1.80V per cell @ 25°C(77°F)
Weight	Approx. 21 kg (46.3 lbs)
Dimensions	Length : 235 mm Width : 174 mm Height : 218 mm Total Height : 225 mm
Internal Resistance (full charged)	Approx. 6.0 mΩ @ 25°C(77°F)
Maximum Discharge Current	403 A (5sec)
Self Discharge @25°C(77°F)	Less than 4% after 30 days storage
Operating Temperature Range	Discharge: -40°C~50°C(-40°F~122°F) Charge: -20°C~45°C(-4°F~113°F) Storage:-20°C~40°C(-4°F~104°F)
Recommended Operating Temperature	15°C~25°C (59°F~77°F)
Maximum Charging Current Limited	13 A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell, Temps coefficient -3 mV/°C Equalize: 2.35 V/cell
Terminal	M6
Container Materials	ABS
Capacity Affected by Temperature	105 % @ 40°C 85 % @ 0°C 60 % @ -20°C
Design Life @25°C(77°F)	10 years

## Attain Certificate

- ISO 9001
- ISO 14001
- GB/T 28001
- UL
- CE

## Technical Features

- ▶ Adopt high strength ABS plastic, compact structure for battery container and valve, good impact resistance, and shock resistant performance
- ▶ Adopt multi-element alloy grids, low internal resistance, good corrosion resistance ability and charging acceptability.
- ▶ New production process for plate, improve the utilization of active material
- ▶ High-purity electrolyte and special additives, low self-discharge
- ▶ Multi-layer seal technology and special seal glue, no leakage and no acid mist escape, safe and reliable

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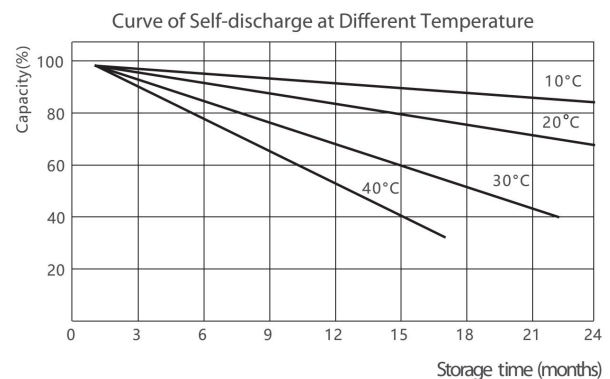
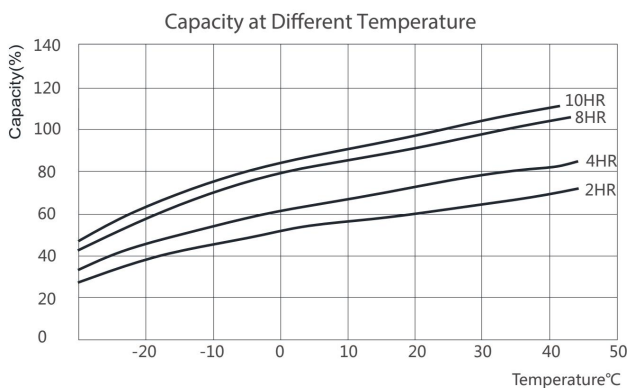
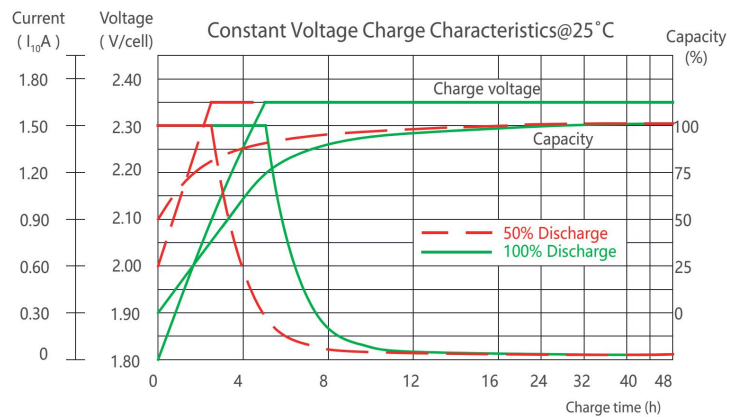
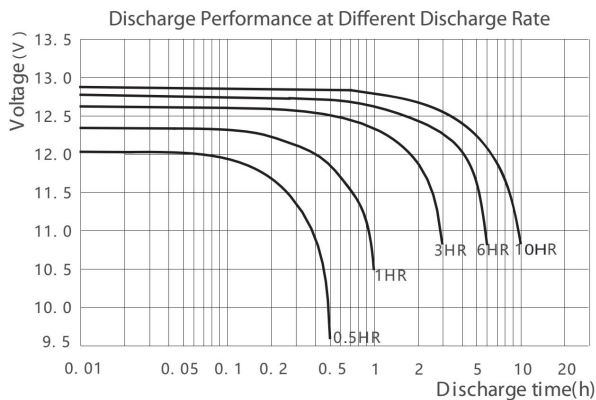
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	121	99.4	88.4	75.7	56.7	42.3	35.1	21.0	15.7	12.6	10.6	9.33	7.54	6.42	3.37
1.80V/cell	144	111	96.2	81.2	60.2	44.1	36.1	21.8	16.3	13.0	10.9	9.56	7.71	6.55	3.44
1.75V/cell	156	118	101	85.2	63.2	46.0	37.4	22.5	16.6	13.3	11.1	9.74	7.85	6.63	3.48
1.70V/cell	168	125	106	88.9	65.8	47.6	38.5	23.1	17.0	13.5	11.3	9.90	7.96	6.71	3.52
1.67V/cell	174	128	107	91.3	68.1	49.1	39.5	23.6	17.3	13.7	11.5	10.0	8.06	6.77	3.56
1.60V/cell	186	134	112	94.8	70.5	50.4	40.4	24.0	17.6	13.9	11.6	10.1	8.13	6.82	3.58

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

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	228	188	167	144	108	81.3	67.8	41.4	31.0	25.0	21.1	18.6	15.1	12.9	6.77
1.80V/cell	264	207	180	153	115	84.5	69.5	42.9	32.1	25.7	21.6	19.0	15.4	13.1	6.88
1.75V/cell	283	218	189	160	120	87.8	71.8	44.1	32.7	26.2	21.9	19.3	15.6	13.2	6.95
1.70V/cell	298	227	196	166	124	90.7	73.8	45.1	33.3	26.6	22.2	19.6	15.8	13.3	7.01
1.67V/cell	306	230	199	170	128	93.0	75.4	45.9	33.8	27.0	22.5	19.8	15.9	13.4	7.06
1.60V/cell	321	239	206	175	131	94.9	76.6	46.5	34.2	27.2	22.7	19.9	16.0	13.5	7.09

## Performance Curve



Declaration: This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact CHINASHOTO for the latest information.

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