

6-GFM Series

Valve-Regulated Lead-Acid Battery
6-GFM-120



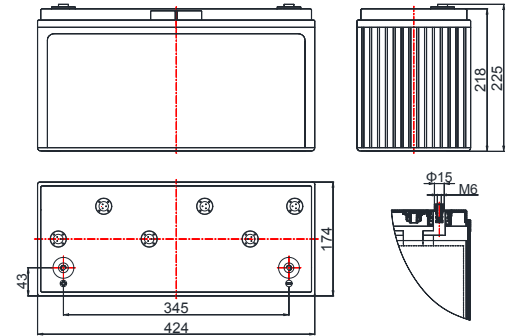
Main Applications

- ▶ 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	120Ah @ 10hr to 1.80V per cell @ 25°C(77°F)
Weight	Approx. 36.5 kg (80.47 lbs)
Dimensions	Length : 424 mm Width : 174 mm Height : 218 mm Total Height : 225 mm
Internal Resistance (full charged)	Approx. 4.2 mΩ@ 25°C(77°F)
Maximum Discharge Current	744 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	24 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/ABS V0 (Optional)
Capacity Affected by Temperature	105 % @ 40°C 85 % @ 0°C 60 % @ -20°C
Design Life @25°C(77°F)	10 years

Attain Certificate

- ISO9001
- ISO14001
- ISO18001
- 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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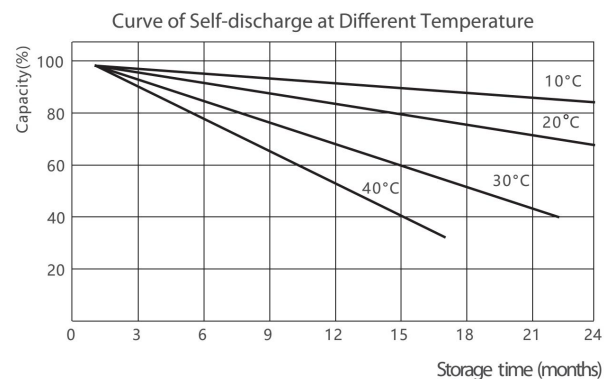
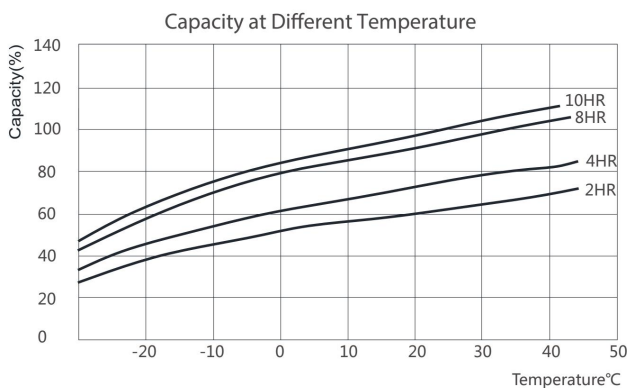
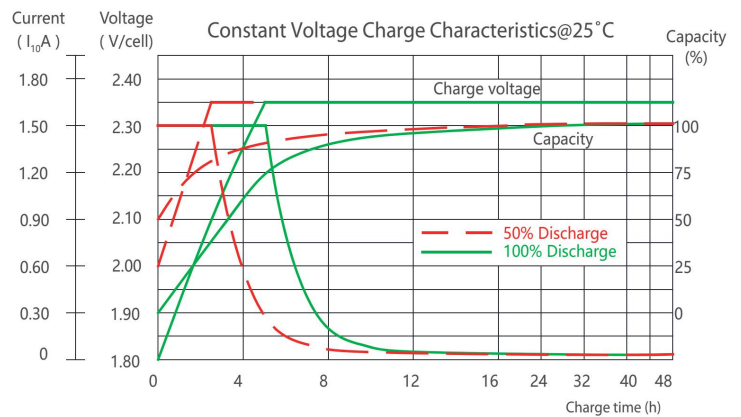
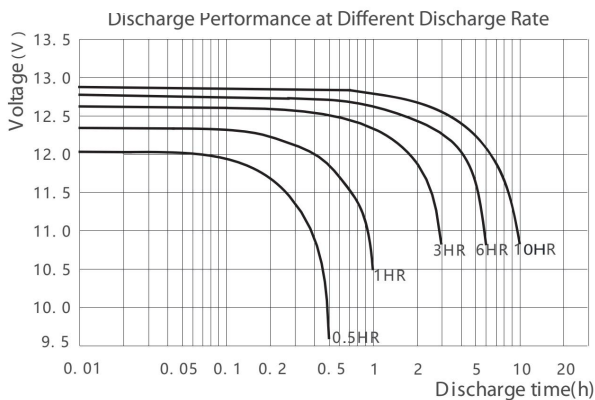
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	215	177	157	135	101	76.0	64.8	39.0	29.1	23.4	19.6	17.4	13.9	11.9	6.25
1.80V/cell	257	199	172	145	108	79.2	66.6	40.5	30.3	24.1	20.1	17.7	14.3	12.1	6.37
1.75V/cell	278	211	179	152	113	82.5	69.0	41.8	30.9	24.6	20.6	18.1	14.5	12.3	6.46
1.70V/cell	298	221	188	158	117	85.5	71.2	42.8	31.5	25.0	21.0	18.4	14.7	12.5	6.53
1.67V/cell	310	226	191	162	122	88.1	73.0	43.7	32.1	25.5	21.2	18.7	14.9	12.6	6.60
1.60V/cell	330	239	199	170	126	90.4	74.5	44.4	32.6	25.9	21.4	18.8	15.0	12.7	6.65

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	406	334	297	256	194	145	126	77	57.6	46.5	39.2	34.5	28.0	23.8	12.6
1.80V/cell	471	367	321	273	205	150	128	80	59.5	47.7	40.0	35.2	28.5	24.2	12.7
1.75V/cell	504	388	336	285	213	156	133	82	61	48.6	40.7	35.9	29.0	24.4	12.8
1.70V/cell	531	404	349	296	221	160	137	84	62	49.3	41.3	36.3	29.2	24.7	12.9
1.67V/cell	544	410	353	302	227	165	139	85	63	50.1	41.8	36.8	29.6	24.8	13.1
1.60V/cell	572	426	365	311	233	170	141	86	63	50.4	42.2	37.0	29.7	24.9	13.2

Performance Curve



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