

# 6-GFM Series

6-GFM-40



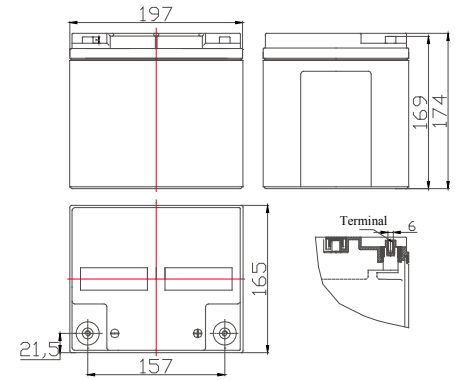
## Main Applications

- ▣ 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

Normal Voltage	12V
Capacity	40Ah @ 10hr to 1.80V per cell @ 25 °C (77 °F)
Weight	Approx. 13.2kg (29.04 lbs)
Dimensions	Length: 197mm    Width: 165mm Height: 170mm    Total Height: 174mm
Internal Resistance (full charged)	Approx. 8.0mΩ@ 25 °C (77 °F)
Maximum Discharge Current	235A (5sec)
Self Discharge @ 25 °C (77 °F)	Less than 8 % after 90 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	8A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell, Temps coefficient -3 mV/ °C Cycle: 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(ZL02112896.0),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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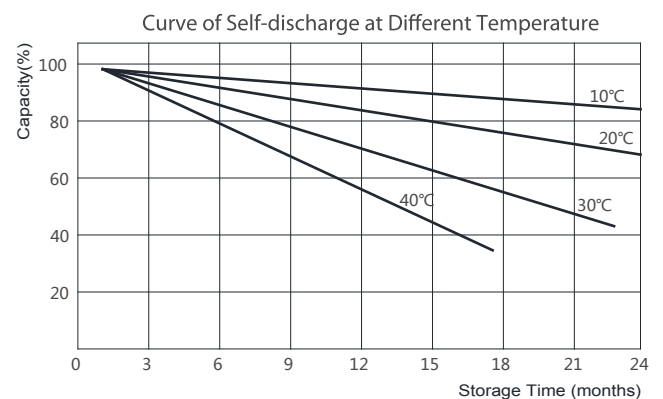
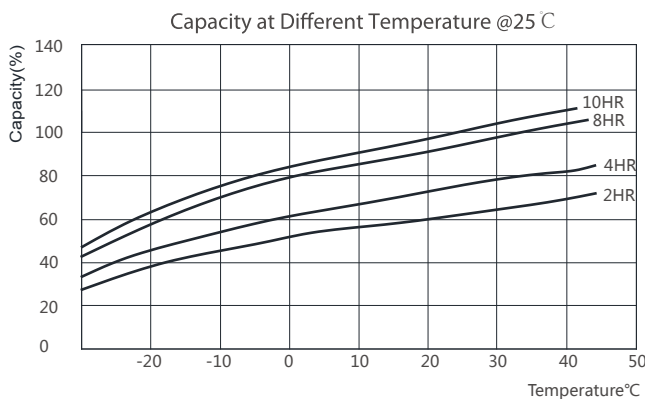
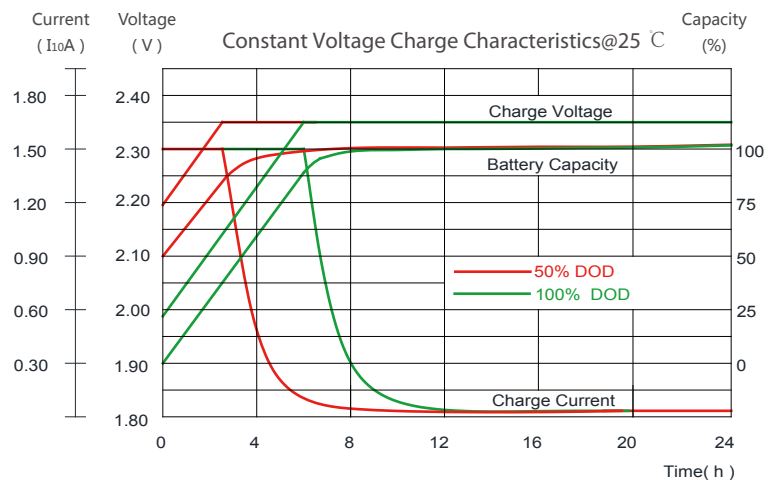
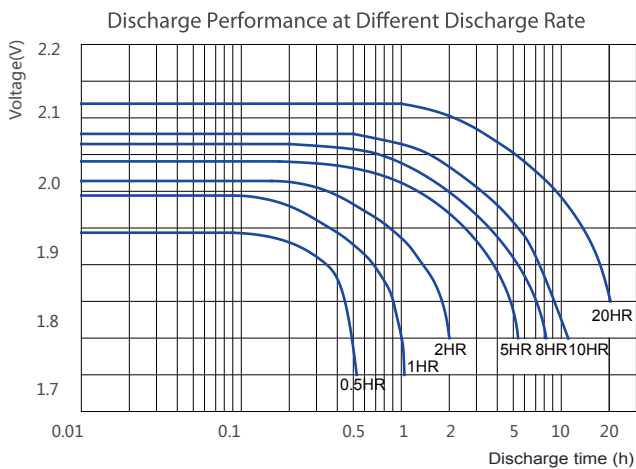
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	30min	1hr	1.5hr	2hr	2.5hr	3hr	4hr	6hr	8hr	10hr	20hr
1.60V /cell	143	106	82.0	50.9	25.0	17.2	14.7	12.6	11.4	8.41	6.25	4.95	4.36	2.19
1.67V /cell	140	103	80.9	50.3	24.6	16.9	14.5	12.4	11.2	8.34	6.16	4.92	4.33	2.17
1.70V /cell	134	100	78.2	48.9	24.1	16.5	14.2	12.0	10.8	8.26	6.02	4.85	4.27	2.14
1.75V /cell	122	91.2	71.2	46.7	23.5	16.0	14.0	11.8	10.6	8.25	6.00	4.76	4.15	2.11
1.80V /cell	107	80.2	67.2	44.8	22.7	15.7	13.8	11.7	10.5	8.15	5.95	4.62	4.09	2.08
1.85V /cell	93.5	75.3	58.5	42.1	21.8	14.8	13.5	11.4	10.3	7.96	5.83	4.53	3.94	2.04

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

F.V/Time	5min	10min	15min	30min	1hr	1.5hr	2hr	2.5hr	3hr	4hr	6hr	8hr	10hr	20hr
1.60V /cell	247	183	142	88.1	45.0	34.5	27.8	24.7	21.5	16.5	12.7	9.92	8.71	4.78
1.67V /cell	242	179	141	87.5	44.6	34.3	27.6	24.5	21.3	16.4	12.5	9.81	8.63	4.76
1.70V /cell	237	177	138	86.6	44.2	33.7	27.1	24.1	21.0	16.3	12.1	9.57	8.43	4.74
1.75V /cell	221	165	129	84.5	43.6	33.3	27.0	23.9	20.7	16.2	11.9	9.49	8.16	4.70
1.80V /cell	198	148	124	82.9	43.0	33.0	26.8	23.7	20.6	16.0	11.8	9.27	8.02	4.62
1.85V /cell	178	143	111	80.0	42.4	31.7	26.5	23.5	20.4	15.8	11.7	8.94	7.93	4.57

## Performance Curve:



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