

# GFM

## Series VRLA Battery

### GFM-1000



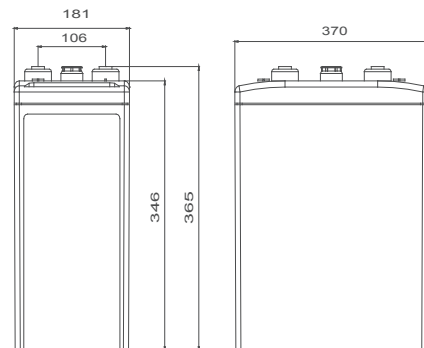
### Main Applications

- ▶ Backup power for telecom and signal system
- ▶ Backup power for electric system and nuclear plants
- ▶ Storage for solar, wind and hydroelectricity energy
- ▶ Backup power for military and maritime equipment
- ▶ Backup power for UPS, emergency lighting

### Benefits

- ▶ Reduce operational cost
- ▶ Excellent deep cycling performance
- ▶ Reduce CO<sub>2</sub> emission
- ▶ Long life

### Dimensions



### Technical Parameters

Nominal Voltage	2 V
Capacity	1000 Ah @ 10hr to 1.80 V @ 25°C(77°F)
Weight	56.5 kg (124.56 lbs)
Dimensions	Length: 181 mm (7.13 in) Width: 370 mm (14.57 in) Height: 346 mm (13.62 in) Total height: 365 mm (14.37 in)
Internal Resistance (full charged)	0.36 mΩ
Short-circuit Current	10010 A
Self Discharge @25°C(77°F)	Less than 3% 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)
Recommended Charging Current	150 A
Charging Voltage @25°C(77°F)	Float: 2.23 V/cell Equalize: 2.35 V/cell
Terminal	M8
Container Materials	ABS/ABS V0 (Optional)
Capacity Affected by Temperature(C <sub>10</sub> )	106% @ 40°C(104°F) 85% @ 0°C(32°F) 60% @ -20°C(-4°F)
Design life @25°C(77°F)	15 years

### Certification

- ISO 9001: 2008
- ISO 14001: 2004
- GB/T 28001- 2011
- UL
- CE

### Technical Features

- ▶ Best performance for charge acceptability
- ▶ Excellent capacity retention rate
- ▶ Excellent capacity recovery performance
- ▶ Long life design for cyclic or float application



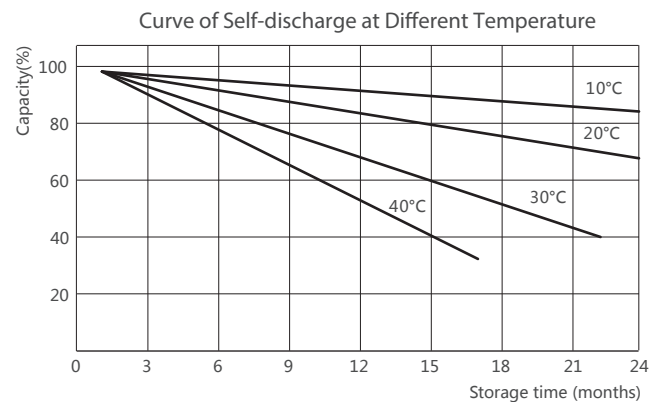
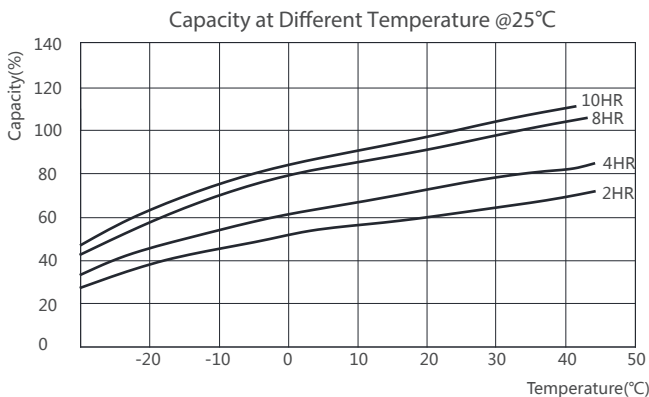
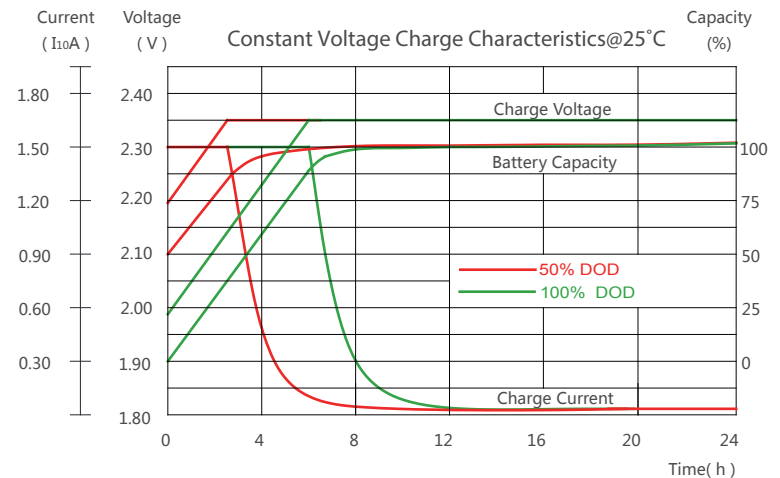
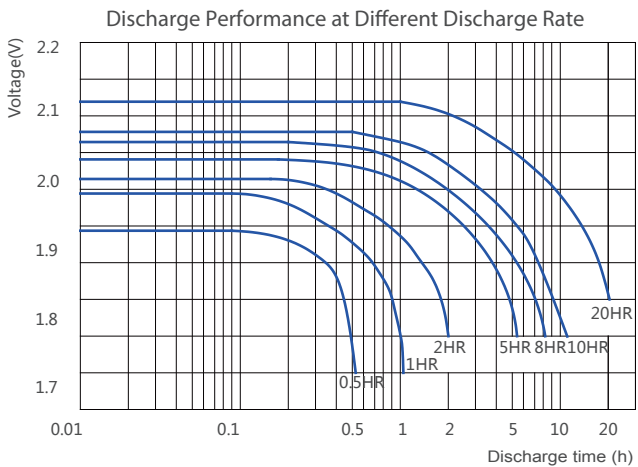
### Constant Current Discharge Characteristics Unit: A (25°C,77°F)

F.V/Time	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	398	358	288	215.1	181.7	149.0	127.5	109.9	89.3
1.85V	431	406	309	236.8	194.2	161.5	138.2	115.8	97.1
1.80V	516	419	327	251.9	201.0	171.2	151.0	119.8	101.0
1.75V	553	439	342	258.5	205.8	174.0	152.9	121.8	101.9
1.70V	583	458	353	263.2	208.7	176.0	154.9	122.8	102.4
1.65V	608	468	361	266.0	210.6	176.9	155.9	123.8	102.9

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

F.V/Time	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	780	706	571	432.1	366.3	300.0	258.8	221.9	181.7
1.85V	847	792	604	470.8	387.5	324.0	277.5	234.0	195.0
1.80V	995	809	635	495.3	401.0	341.3	302.0	239.8	201.7
1.75V	1045	842	660	505.7	407.7	346.2	306.9	244.1	203.9
1.70V	1099	870	677	513.2	412.5	350.0	309.8	245.6	205.6
1.65V	1130	880	687	517.0	415.4	351.9	310.8	246.2	206.2

### Performance Curve



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