

GFM

Series VRLA Battery

GFM-2000



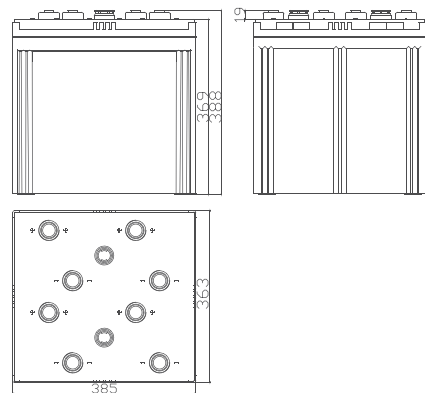
Main Applications

- ▶ 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 CO₂ emission
- ▶ Long life

Dimensions



Technical Parameters

Nominal Voltage	2 V
Capacity	2000 Ah @ 10hr to 1.80 V @ 25°C(77°F)
Weight	120 kg (264.6 lbs)
Dimensions	Length: 385 mm (15.12 in) Width: 363 mm (14.29 in) Height: 369 mm (14.53 in) Total height: 388 mm (15.28 in)
Internal Resistance (full charged)	0.18 mΩ
Short-circuit Current	18520 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	300 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 ₁₀)	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



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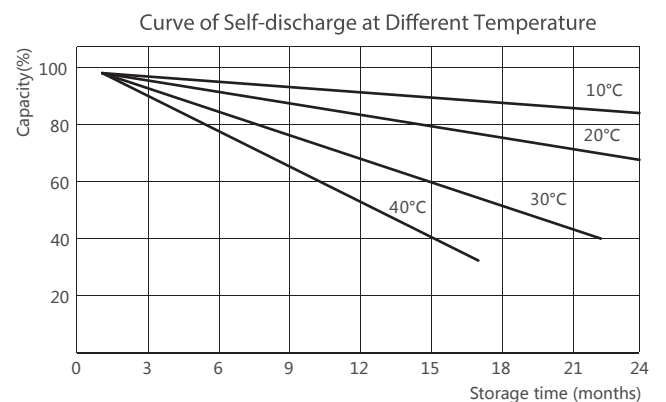
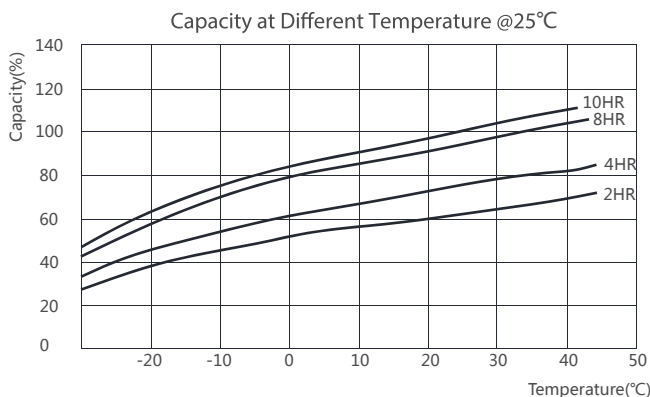
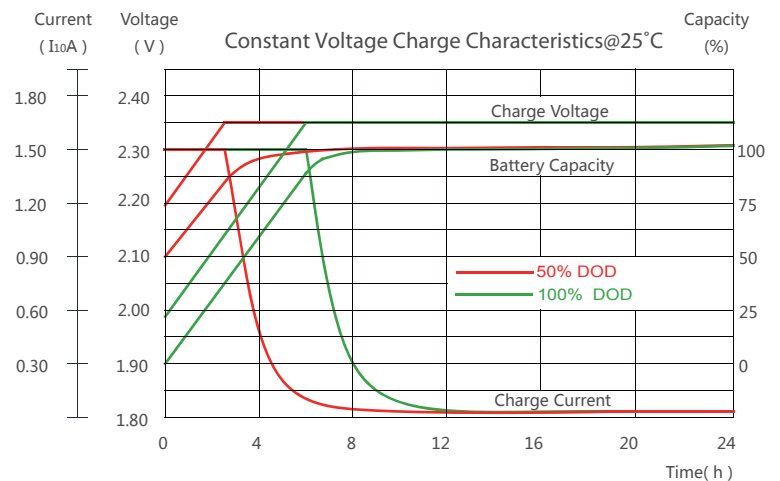
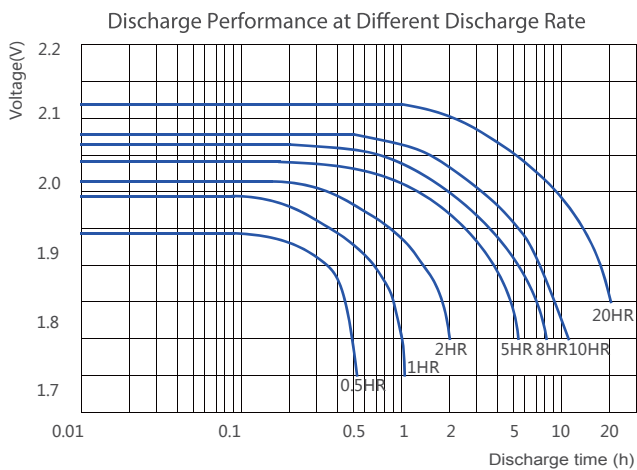
Constant Current Discharge Characteristics Unit: A (25°C,77°F)

F.V/Time	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	790	717	576	430	363	297	256	219	179
1.85V	863	813	617	475	388	323	276	233	193
1.80V	1031	838	654	504	403	341	301	240	201
1.75V	1105	878	684	517	412	348	307	245	204
1.70V	1167	917	707	527	417	353	311	246	206
1.65V	1217	934	721	531	421	355	313	247	207

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	1524	1413	1141	864	732	601	518	444	363
1.85V	1695	1584	1208	942	776	648	554	468	390
1.80V	1992	1619	1270	990	801	683	603	479	403
1.75V	2092	1682	1320	1011	814	693	613	488	408
1.70V	2198	1742	1354	1027	826	701	619	491	412
1.65V	2258	1759	1375	1033	831	704	623	492	413

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 HELIOS for the latest information.

