

GFM

Series VRLA Battery

GFM-400



shoto



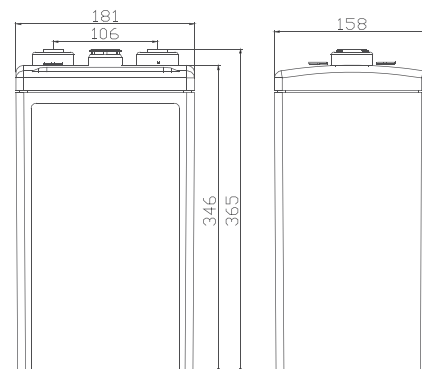
Main Applications

- ▶ 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	400 Ah @ 10hr to 1.80 V @ 25°C(77°F)
Weight	22.7 kg (50.04 lbs)
Dimensions	Length: 181 mm (7.13 in) Width: 158 mm (6.22 in) Height: 346 mm (13.62 in) Total height: 365 mm (14.37 in)
Internal Resistance (full charged)	0.51 mΩ
Short-circuit Current	4380 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	60 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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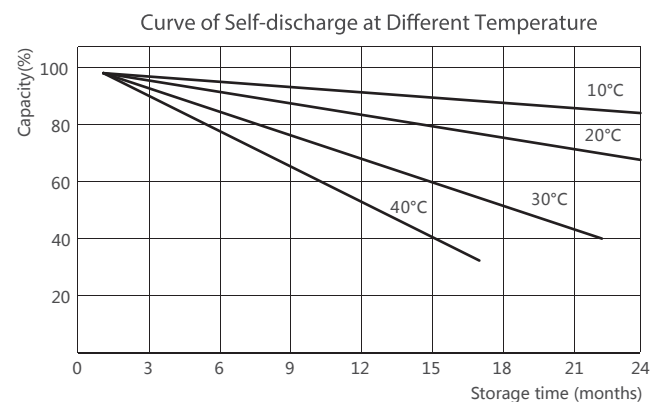
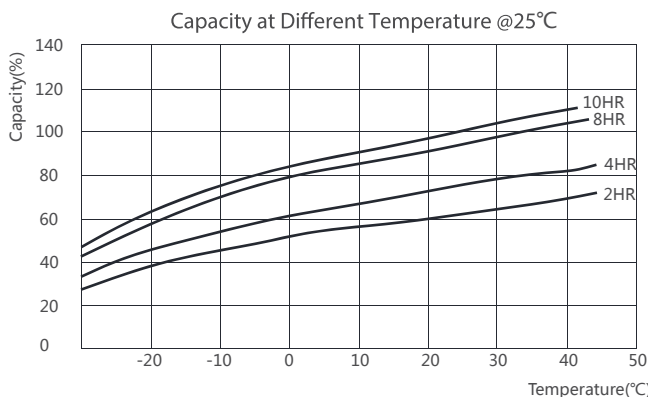
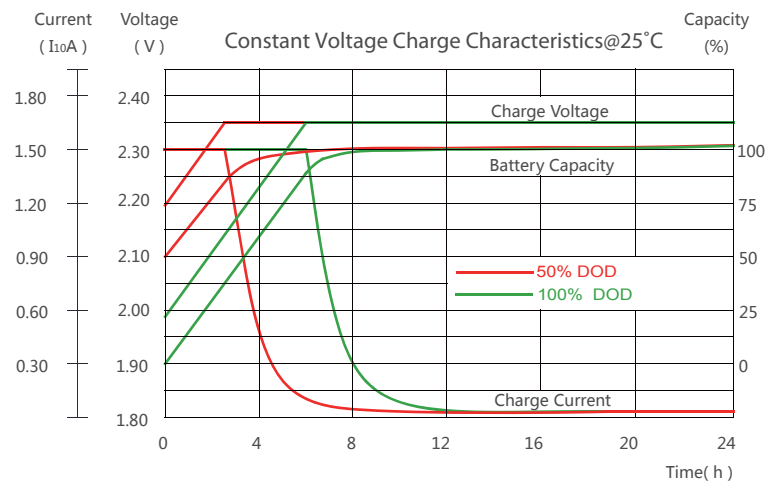
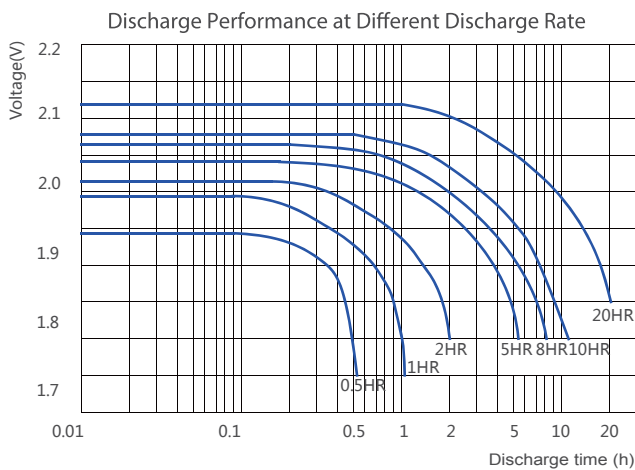
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	170	155	109	83	75	57.8	52.2	44.3	36.8
1.85V	186	176	117	91	81	62.2	56.2	47.0	39.9
1.80V	203	181	128	102	84	67.5	61.4	48.3	41.4
1.75V	225	190	141	110	86	72.4	62.6	49.3	42.0
1.70V	252	198	146	112	87	73.4	63.4	49.7	42.4
1.65V	263	202	149	113	88	73.8	63.8	49.9	42.6

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	310	282	228	172.8	146.3	120.1	103.5	88.8	72.7
1.85V	339	317	242	188.3	155.2	129.6	110.8	93.6	78.1
1.80V	398	324	254	198.0	160.2	136.4	120.7	95.9	80.7
1.75V	419	336	264	202.4	162.9	138.6	122.6	97.6	81.6
1.70V	440	348	271	205.4	165.1	140.1	123.8	98.2	82.2
1.65V	452	352	275	206.6	166.2	140.8	124.4	98.5	82.5

Performance Curve



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