

GFMHR Series

High-rate Valve-regulated Lead Acid Battery

GFMHR-820W



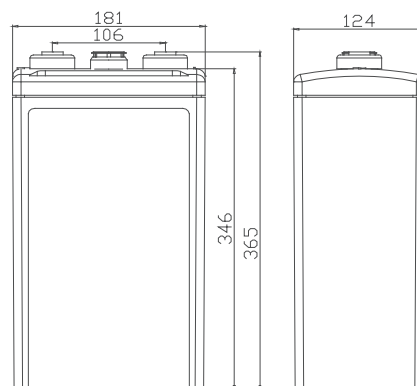
Main Applications

- ▶ IDC and UPS
- ▶ High power & large current application scenarios
- ▶ Backup power for high precision device
- ▶ Emergency lighting, navigation lights

Benefits

- ▶ Specifically designed for high power & large current application scenarios with superior high rate, short term power
- ▶ Designed life of 12 years
- ▶ Low annual operating cost
- ▶ High security, reliability and stability

Dimensions



Technical Parameters

Nominal Voltage	2 V
Capacity	280 Ah @ 10hr to 1.80 V per cell @ 25°C (77°F)
Weight	17.1 kg (37.7 lbs)
Dimensions	Length: 124 mm (4.88 in) Width: 181 mm (7.13 in) Height: 346 mm (13.62 in) Total height: 365 mm (14.37 in)
Internal Resistance (full charged)	0.5 mΩ
Short-circuit Current	5500 A
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)
Recommended Charging Current	42 A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell Equalize: 2.35 V/cell
Terminal	M8
Container Materials	ABS/ABS V0 (Optional)
Capacity Affected by Temperature (C ₁₀)	105% @ 40°C (104°F) 85% @ 0°C (32°F) 60% @ -20°C (-4°F)
Design life @25°C (77°F)	12 years

Certification

- ISO9001
- ISO14001
- GB/T 28001

Technical Features

- ▶ Lower internal resistance and voltage drop, suited for high rate discharge applications and high efficient UPS
- ▶ Lower self-discharge rate, better charge acceptability and higher sealing reaction efficiency
- ▶ Exquisite craftsmanship and good coherence of internal resistance, capacity

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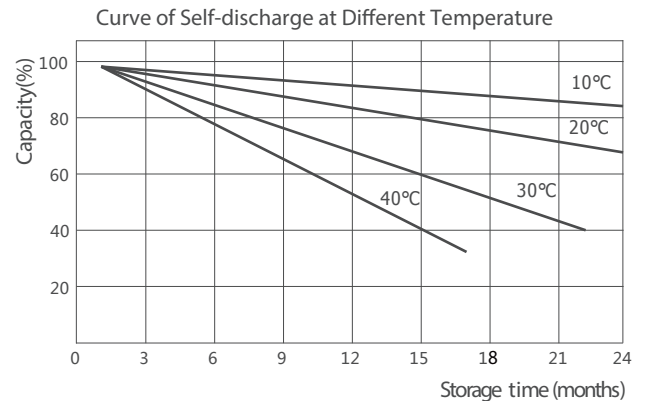
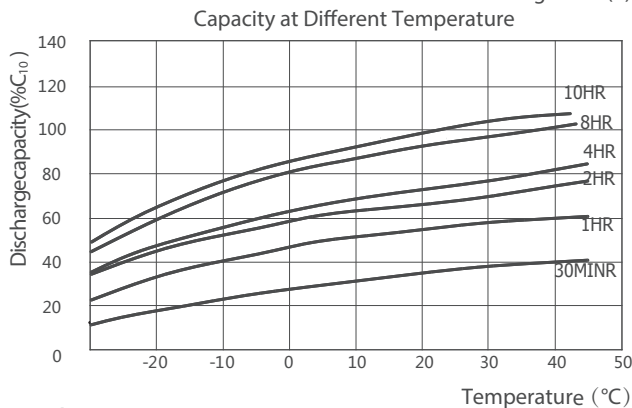
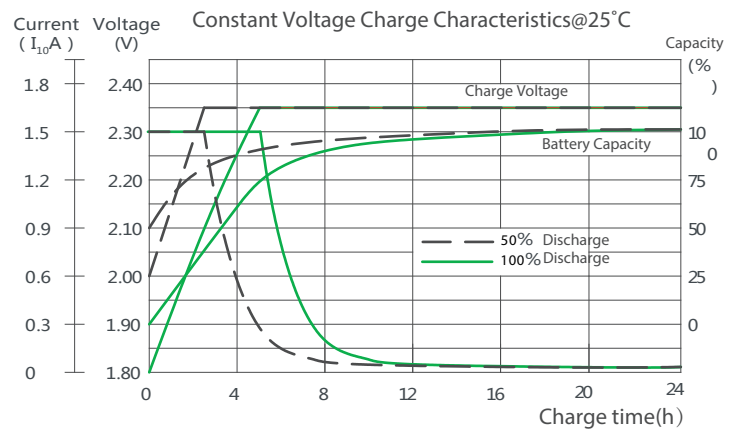
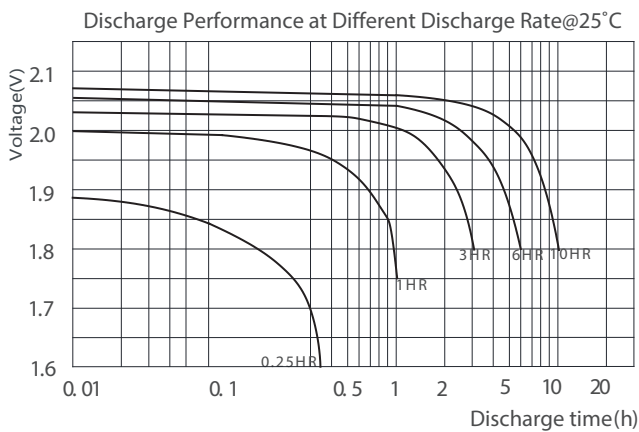
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	1h	2h	3h	4h	5h	6h	8h	10h
1.60V	719	596	504	409	314	185	--	--	--	--	--	--	--
1.67V	686	556	471	394	305	182	107	78.4	65.6	54.9	--	--	--
1.70V	657	528	442	376	296	178	105	77.2	64.3	54.4	46.8	35.9	--
1.75V	555	482	404	344	287	170	103	75.7	63.6	54.0	46.1	35.6	28.9
1.80V	501	406	358	302	252	152	99	74.2	62.5	53.8	45.6	35.2	28.3
1.85V	405	333	298	246	210	120	94	69.3	57.7	50.9	43.9	33.9	27.8

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

F.V/Time	5min	10min	15min	20min	30min	1h	2h	3h	4h	5h	6h	8h	10h
1.60V	1198	1051	866	725	557	346	--	--	--	--	--	--	--
1.67V	1149	1012	820	702	545	337	201	149.2	125.6	107.0	--	--	--
1.70V	1068	973	799	667	541	332	198	147.7	123.7	106.5	92.0	68.9	--
1.75V	925	898	749	643	533	321	194	144.7	122.5	105.9	90.7	68.4	56.8
1.80V	866	753	673	562	475	289	189	142.8	121.0	105.6	90.2	67.9	55.6
1.85V	736	652	572	471	404	234	187	138.5	116.6	104.3	90.0	67.4	54.6

Performance Curve



*Declaration:

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