

# GFMHR Series

## High-rate Valve-regulated Lead Acid Battery

### GFMHR-1100W



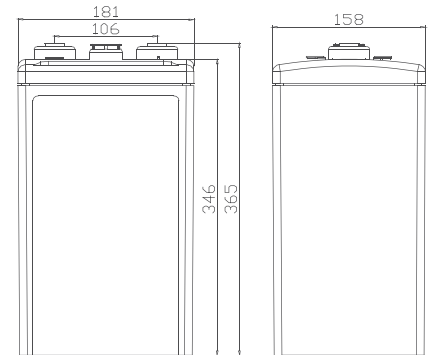
### Main Applications

- ▣ 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	400 Ah @ 10hr to 1.80 V per cell @ 25°C(77°F)
Weight	22.7 kg (50.1 lbs)
Dimensions	Length: 181 mm (6.22 in) Width: 181 mm (7.13 in) Height: 346 mm (13.62 in) Total height: 365 mm (14.37 in)
Internal Resistance (full charged)	0.38 mΩ
Short-circuit Current	7000 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	60A
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 <sub>10</sub> )	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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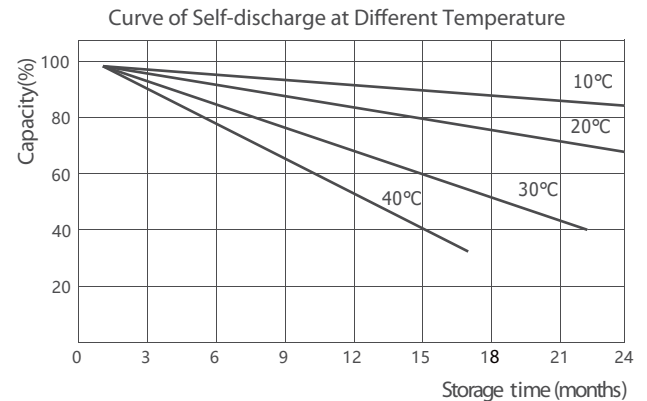
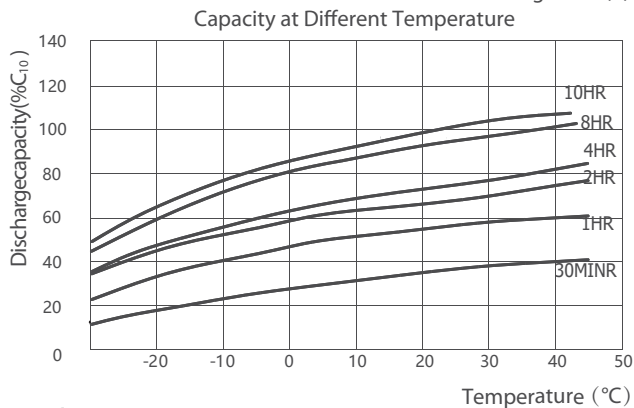
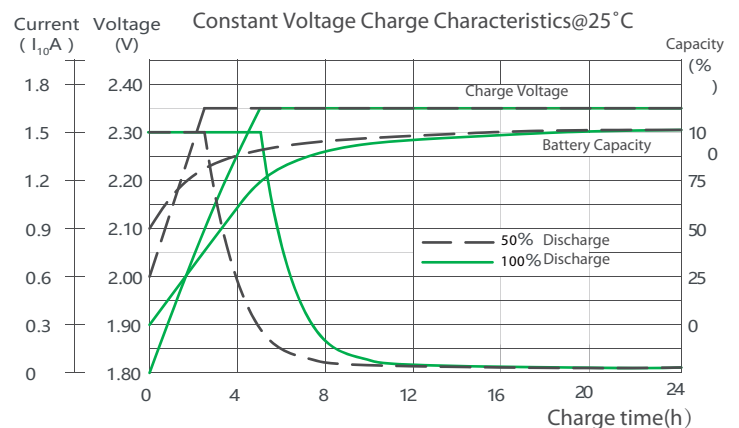
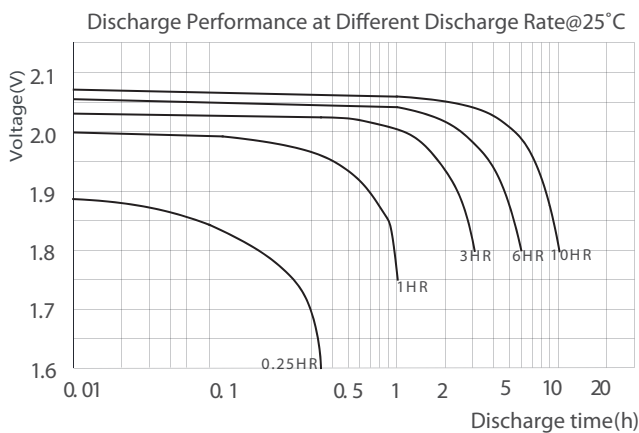
### Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	5min	10min	15min	20min	30min	1h	2h	3h	4h	5h	6h	8h	10h
1.60V	969	796	673	552	445	252	--	--	--	--	--	--	--
1.67V	913	744	630	534	433	245	145	109.1	87.9	75.0	--	--	--
1.70V	874	706	592	509	420	240	143	107.4	86.2	74.2	65.2	48.6	--
1.75V	739	645	542	466	408	230	138	105.4	85.3	73.8	64.2	48.2	40.8
1.80V	667	544	479	408	358	206	134	103.3	83.8	73.5	63.5	47.6	40.2
1.85V	539	446	399	333	298	161	128	96.5	77.4	69.5	61.2	45.9	39.7

### 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	1600	1404	1156	979	781	465	--	--	--	--	--	--	--
1.67V	1529	1348	1100	945	769	457	272	206.6	167.5	147.4	--	--	--
1.70V	1442	1314	1081	910	766	453	270	205.6	165.8	146.9	129.4	96.8	--
1.75V	1248	1213	1010	877	756	437	265	201.5	164.2	146.1	127.5	96.0	79.8
1.80V	1170	1073	909	768	674	394	259	199.0	162.5	145.7	127.0	95.5	78.1
1.85V	994	912	773	643	574	320	255	193.0	156.4	143.9	126.6	94.8	77.5

### Performance Curve



#### \*Declaration:

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