

# GFMJ(OPzV)

VRLA Gel Battery  
GFMJ-1000



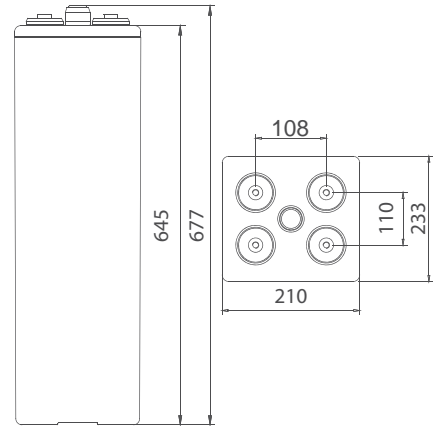
## Main Applications

- Deep cycling energy storage application
- Solar & wind energy storage system
- Off-grid & bad-grid hybrid sites
- Floating applications for telecom sites

## Benefits

- Long life design for cyclic or float application
- Excellent charge acceptability and deep cycling performance
- Excellent over discharge recovery capability
- Superior charging & discharging ability in low current
- Extend service life under high temperature

## Dimensions



## Technical Parameters

Nominal Voltage	2 V
Capacity	1000 Ah @ 10hr to 1.80 V @ 25°C(77°F)
Weight	77.0 kg (169.75 lbs)
Dimensions	Length:233 mm(9.17 in) Width:210 mm(8.27 in) Height:645 mm(25.39 in) Total height:677 mm(26.65 in)
Internal Resistance (full charged)	0.27 mΩ @ 25°C(77°F)
Short-circuit Current	7439 A
Self Discharge @25°C(77°F)	Less than 30% after 180 days storage
Operating Temperature Range	Discharge: -20°C ~ 50°C(-4°F ~ 122°F) Charge: -20°C ~ 50°C(-4°F ~ 122°F) Storage: 5°C ~ 40°C(41°F ~ 104°F)
Recommended Operating Temperature	20°C ~ 25°C (68°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	M10
Container Materials	ABS/ABS V0 (Optional)
Capacity Affected by Temperature(C <sub>10</sub> )	105% @ 40°C(104°F) 74% @ 0°C(32°F) 50% @ -20°C(-40°F)
Design life @25°C(77°F)	20 years

## Certification

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

## Technical Features

- According to DIN-40742 standards, design life of 20 years
- Tubular plate & special gel electrolyte, which can prevent active material falling and avoid acid stratification
- High stability and security, millions of batteries are in service
- Higher thermal capacity & better thermal diffusivity

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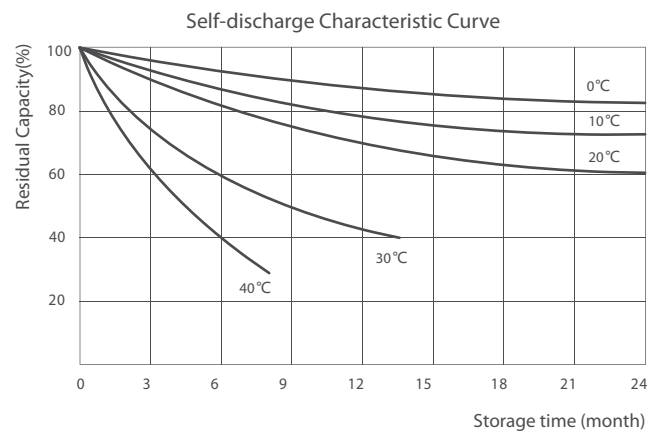
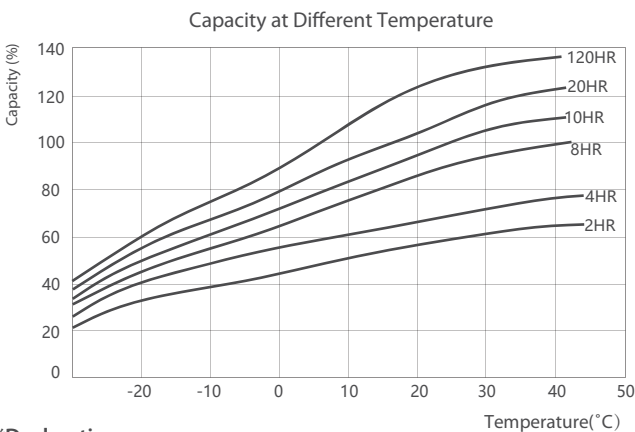
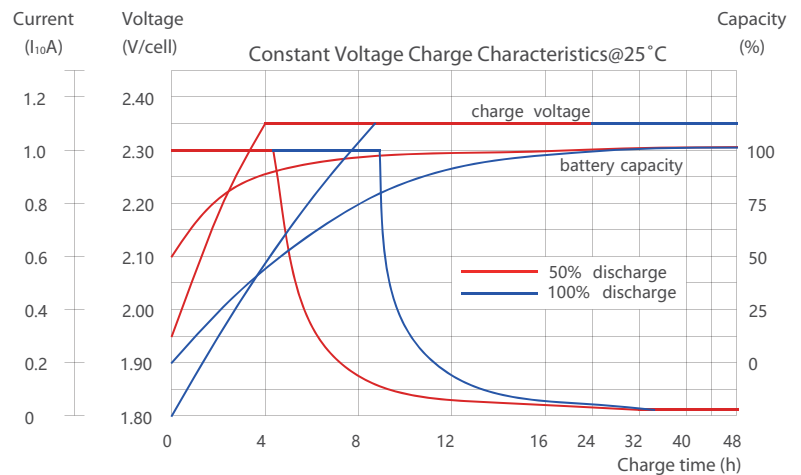
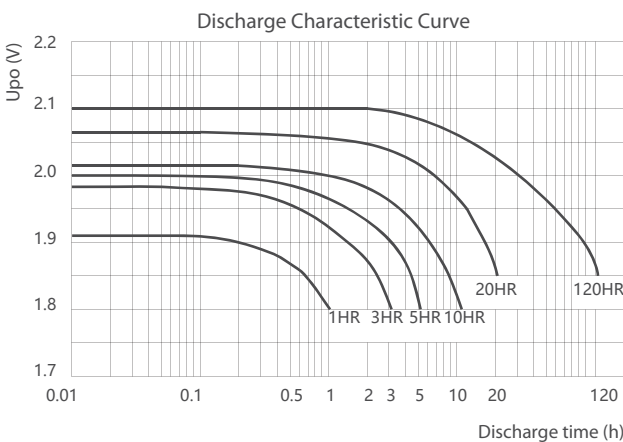
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	12hr	20hr	100hr	120hr
1.80V	480	332	250	204	173	150	120	100	90	55	--	--
1.83V	450	305	243	200	169	146	117	97	88	54	--	--
1.85V	415	287	235	194	161	143	111	94	84	52.5	12.5	10.8
1.87V	365	275	228	185	154	138	105	89	82	50.5	12.0	10.4
1.90V	340	253	215	170	148	133	101	83	75	49.5	11.3	9.6

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

F.V/Time	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	12hr	20hr	100hr	120hr
1.80V	880	610	460	375	320	280	230	200	170	102	--	--
1.83V	835	575	450	370	315	278	228	190	165	101	--	--
1.85V	785	550	442	365	305	270	218	183	160	100	25	20.5
1.87V	700	525	425	354	295	263	208	175	155	98	24	20
1.90V	658	490	411	327	285	257	200	165	149	96	22.5	19

## Performance Curve



### \*Declaration:

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