

# 6-GFM-100Ah Valve-regulated Lead Acid Battery Specification

We are an ISO9001 certified organization. And the products are approved by CE & UL. The nominal voltage of this series is 12V. And the capacity ranges from 33Ah to 250Ah. Their typical applications include: emergency lighting systems, electricity power supply systems, communication systems, UPS systems, starting systems, solar systems etc.

Battery Construction		General Features
Component	Material	Maintenance free
Positive plate	Lead dioxide	Convenient for installation
Negative plate	Lead	Safety and no leakage
Container	ABS	Excellent recharge and discharge performance
Cover	ABS	Low self-discharge rate, charge each standby 6 months, temperature 25°C
Safety valve	Rubber	Adapt to high or low temperature
Terminal	Copper	Good deep discharge performance
Separator	AGM glass	Longer cycle life
Electrolyte	Sulfuric acid	UL approval

## Performance Characteristics

### 1.Dimension and weight

Length	330mm
Width	173mm
Height	217mm
Total Height	222mm
Reference Weight	30kg

### 2.Functional Parameter

Rated Voltage	12V
Numbers of cells	6 Cells
Designed Life	5~8 Years

### 3.Rated Capacity at 25°C (77° F)

10 hr rate (0.1C, 10.8V)	100Ah
3 hr rate (0.25C, 10.8V)	76.8Ah
1 hr rate (0.55C, 10.5V)	55.2Ah

### 4.Capacity affected by Temperature (10hour rate)

40 °C (104° F)	103%
25 °C (77° F)	100%
0 °C (32° F)	85%
-15°C (5° F)	65%

### 5.Charge Method: constant-voltage charging at 25°C (77° F)

Cyclic use	14.4~14.9V
Maximum charging current	25A
Temperature Compensation	-30mV/°C
Float Use	13.6~13.8V
Temperature Compensation	-20mV/°C

### 6.Environment Temperature Requirements

Discharge Temperature	-15~50°C
Charge Temperature	0~40°C
Storage Temperature	-15~40°C

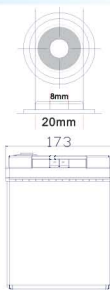
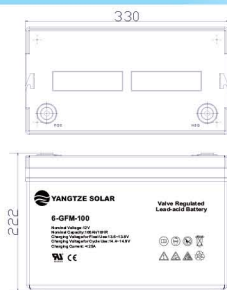
### 7.Inner Resistance&Max. Discharge Current

A fully charged battery at 25°C (77° F)	4.5mΩ
Max. Discharge Current	1500A (5s)
Short Circuit Current	5000A

### 8.Self-discharge

3% Of the capacity per month at 25°C (77° F)	
Capacity after 3 month storage	91%
Capacity after 6 month storage	82%
Capacity after 12 month storage	64%

## Dimensions (mm)



## 3D Model Review



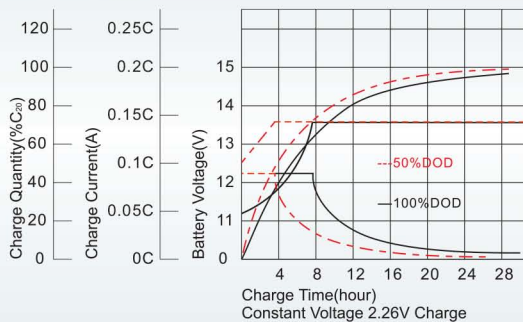
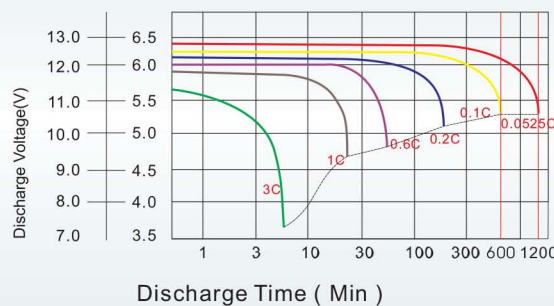
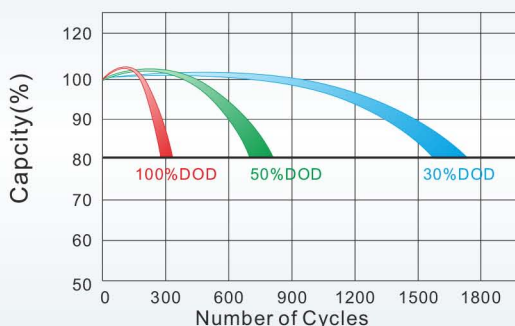
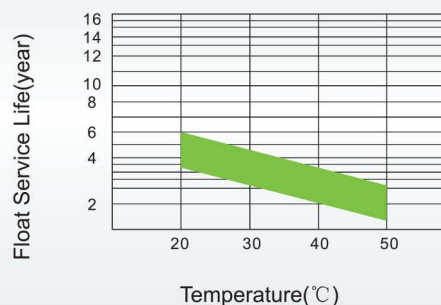
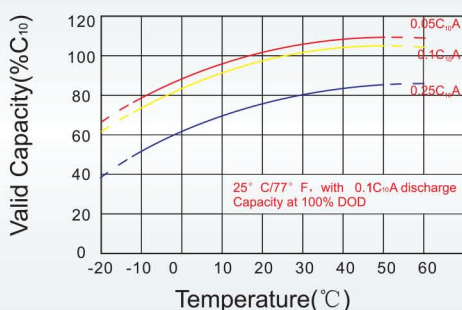
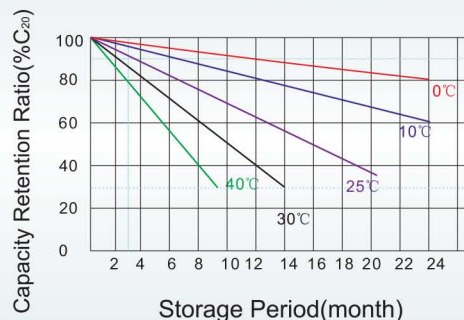
## Constant-current discharge parameter Unit: A (25°C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/cell	229.8	171.9	138.2	113.1	89.8	67.0	52.8	25.6	16.8	10.0	5.20
1.75V/cell	259.0	188.9	151.0	121.7	93.2	69.4	55.2	26.0	17.2	10.1	5.26
1.70V/cell	285.2	205.9	161.2	127.9	97.0	72.2	57.0	26.8	17.7	10.2	5.36
1.65V/cell	314.6	222.2	171.4	135.9	102.3	74.1	58.9	27.9	18.1	10.4	5.42
1.60V/cell	346.9	241.2	183.3	144.8	108.0	77.2	61.0	28.8	18.8	10.5	5.46

## Constant-current discharge parameter Unit: W (25°C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/cell	415.6	313.9	254.6	210.1	168.4	127.7	101.3	49.6	32.8	19.8	10.29
1.75V/cell	458.6	339.3	274.6	223.9	173.4	131.2	105.6	50.2	33.6	19.9	10.37
1.70V/cell	491.0	361.4	289.1	233.6	179.6	136.0	108.4	51.6	34.3	20.1	10.57
1.65V/cell	533.8	386.6	305.0	246.2	187.9	138.1	111.3	53.4	35.1	20.4	10.69
1.60V/cell	575.1	410.1	320.8	259.4	196.9	143.2	114.7	54.9	36.1	20.7	10.73

# 6-GFM-100Ah Valve-regulated Lead Acid Battery Specification

**Charge Characteristics for Float Use @ 25°C/77°F**

**Discharge Characteristics at Various Rates @ 25°C/77°F**

**Cycle Life in Relation to Depth of Discharge**

**Float Service Life**

**Temperature and Valid Capacity**

**Self Discharge Charecteristics**

**Capacity and Open Circuit Voltage**

**Relationship between Charging Voltage and Temperature**
