

## 6-GFM-250Ah 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

Component	Material
Positive plate	Lead dioxide
Negative plate	Lead
Container	ABS
Cover	ABS
Safety valve	Rubber
Terminal	Copper
Separator	AGM glass
Electrolyte	Sulfuric acid

### General Features

Maintenance free
Convenient for installation
Safety and no leakage
Excellent recharge and discharge performance
Low self-discharge rate, charge each standby 6 months, temperature 25℃
Adapt to high or low temperature
Good deep discharge performance
Longer cycle life
UL approval

### Performance Characteristics

#### 1.Dimension and weight

Length	520mm
Width	269mm
Height	220mm
Total Height	225mm
Reference Weight	68kg

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

Cyclic use	14.4~14.9V
Maximum charging current	62.5A
Temperature Compensation	-30mV/℃
Float Use	13.6~13.8V
Temperature Compensation	-20mV/℃

#### 2.Functional Parameter

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

#### 6.Environment Temperature Requirements

Discharge Temperature	-15~50℃
Charge Temperature	0~40℃
Storage Temperature	-15~40℃

#### 3.Rated Capacity at 25℃ (77° F)

10 hr rate (0.1C, 10.8V)	250Ah
3 hr rate (0.25C, 10.8V)	191.7Ah
1 hr rate (0.55C, 10.5V)	138.1Ah

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

A fully charged battery at 25℃ (77° F)	2mΩ
Max. Discharge Current	3750A (5s)
Short Circuit Current	12500A

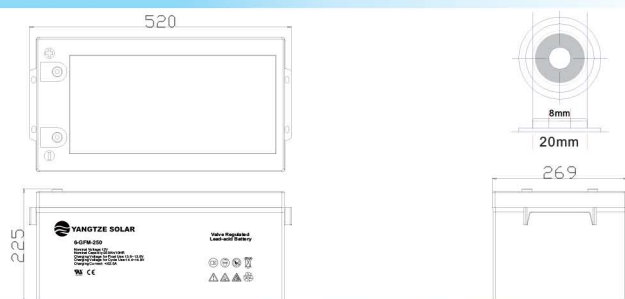
#### 4.Capacity affected by Temperature (10hour rate)

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

#### 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



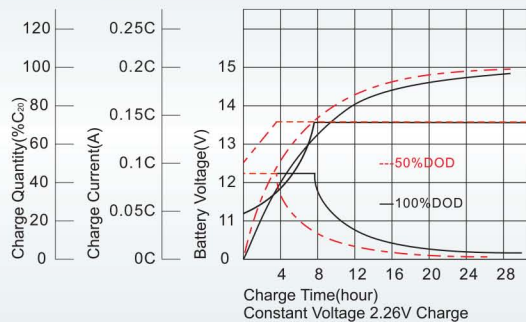
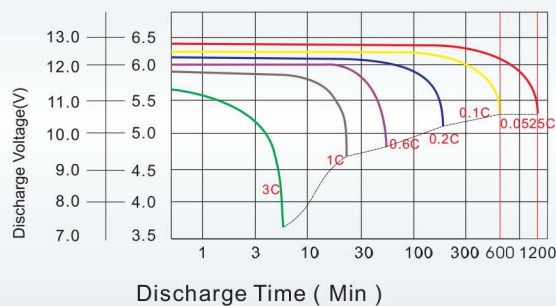
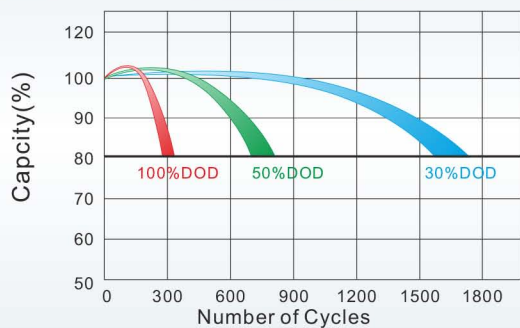
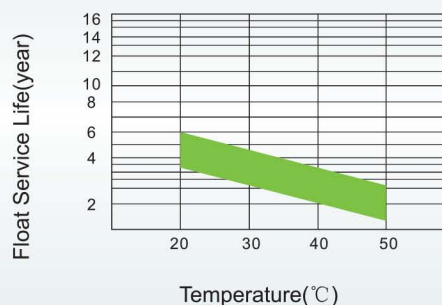
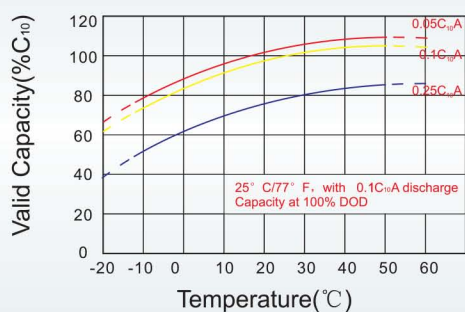
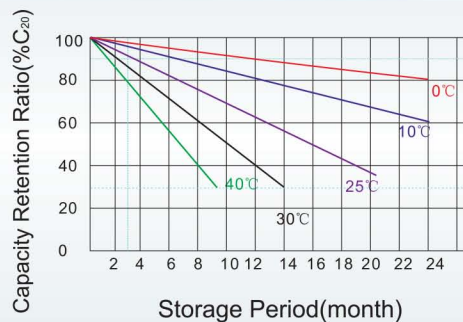
### Constant-current discharge parameter Unit: A (25℃)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/cell	574.4	429.7	345.6	282.8	224.4	167.5	131.9	63.9	41.9	25.0	13.0
1.75V/cell	647.5	472.2	377.5	304.2	233.1	173.6	138.1	65.0	43.1	25.3	13.1
1.70V/cell	713.1	514.7	403.1	319.7	242.5	180.6	142.5	66.9	44.2	25.5	13.4
1.65V/cell	786.4	555.6	428.6	339.7	255.8	185.3	147.2	69.7	45.3	26.0	13.6
1.60V/cell	867.2	603.1	458.3	361.9	270.0	193.1	152.5	71.9	46.9	26.3	13.6

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/cell	1038.9	784.7	636.4	525.3	421.1	319.2	253.3	123.9	81.9	49.4	25.7
1.75V/cell	1146.4	848.3	686.4	559.7	433.6	328.1	263.9	125.6	83.9	49.7	25.9
1.70V/cell	1227.5	903.6	722.8	583.9	448.9	340.0	271.1	128.9	85.8	50.3	26.4
1.65V/cell	1334.4	966.4	762.5	615.6	469.7	345.3	278.3	133.6	87.8	51.1	26.7
1.60V/cell	1437.8	1025.3	801.9	648.6	492.2	358.1	286.7	137.2	90.3	51.7	26.8

# 6-GFM-250Ah 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 Characteristics**

**Capacity and Open Circuit Voltage**

**Relationship between Charging Voltage and Temperature**
