

## PHYSICAL SPECIFICATION

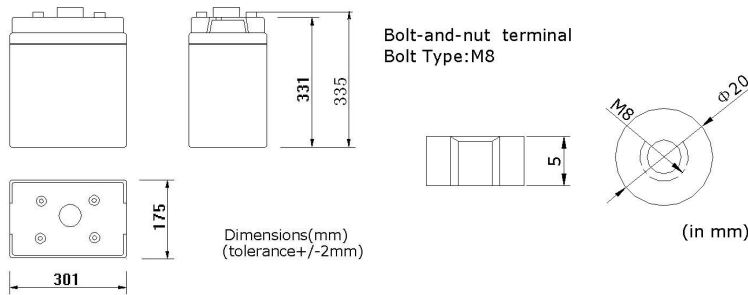
Nominal Voltage		2V
Nominal Capacity (10HR)		600Ah
Dimension	Length	301±2mm (11.85 inches)
	Width	175±2mm (6.89 inches)
	Container Height	331±2mm (13.03 inches)
	Total Height	366±2mm (14.41 inches)
Weight		Approx. 40Kg ±3% (88.16lbs)
Standard Terminal		Bolt-and-nuts terminal Bolt Type: M8



Shimastu Gel series Gel Batteries are manufactured with special separators and silica gel immobilizing the electrolyte inside the battery, it is perfect for frequent cyclic deep discharge or standby applications under harsh environments, and has a long service life.

Features:

1. Special polar plate design, which ensures a designed floating charge life of 20 years at 25°C (77 °F)
2. Equalized current distribution, the active material is not easy to fall off
3. High gas recombination efficiency
4. Good deep discharge resilience performance
5. No delamination phenomena in the electrolyte
6. Manufactured with high-porosity

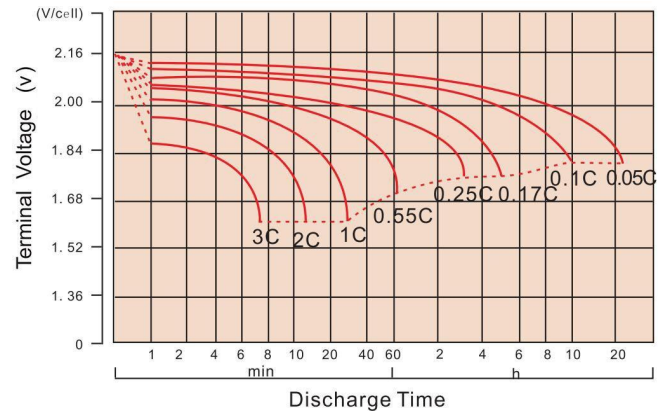


## ELECTRICAL SPECIFICATION

### Characteristics

Capacity	10 hour rate (60A)	600Ah
	5 hour rate (102A)	510Ah
	3 hour rate (150A)	450Ah
	1 hour rate (330A)	330Ah
Capacity affected by temperature	40°C (104 °F)	102%
	25°C (77 °F)	100%
	0°C (32 °F)	85%
Max. Discharge Current	2700A (5 sec)	
Short Circuit Current	5000A	
Designed floating life	20 years (at 25°C)	
Internal Resistance	Full charged battery (25°C, 77 °F) 0.38mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 150A Voltage 2.35~2.40V at 25°C (77 °F) Temperature Coefficient -5mV/°C
	Standby	No limit on Initial Charging Current Voltage 2.25~2.30V at 25°C (77 °F) Temperature Coefficient -3.3mV/°C

### Discharge curves @ 25°C (77 °F)



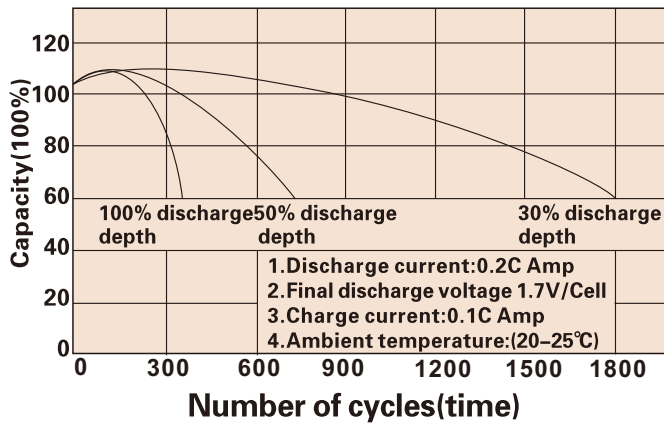
### CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	15MIN	30MIN	1HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	876.8	580.4	367.5	169.8	136.4	113.6	76.3	63.5	33.1
1.65V	821.5	557.2	354.9	164.5	132.8	110.5	75.3	62.7	32.7
1.70V	769.3	532.5	343.5	160.0	129.2	107.6	74.1	61.8	32.2
1.75V	716.0	509.1	330.0	155.1	125.9	104.9	73.1	60.8	31.8
1.80V	661.3	486.5	318.2	150.0	122.3	102.0	71.9	60.0	31.5

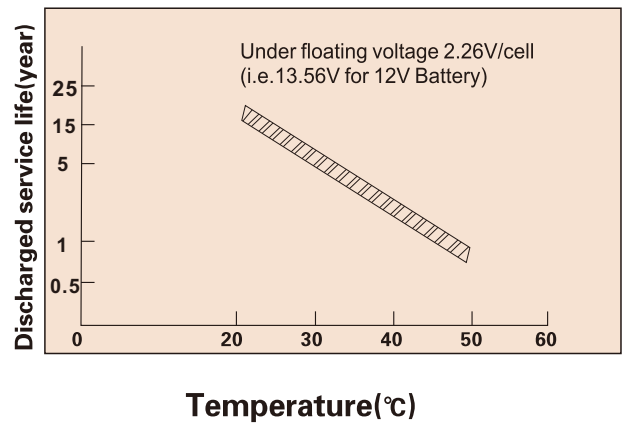
### CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	15MIN	30MIN	1HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	1533.0	1054.1	690.5	323.9	262.0	219.0	150.0	125.3	65.1
1.65V	1457.6	1022.6	670.7	315.6	255.7	213.7	147.4	123.4	64.2
1.70V	1385.5	987.3	652.9	308.0	249.7	208.8	145.4	121.7	63.6
1.75V	1308.1	953.4	631.5	300.5	244.3	204.3	143.6	120.0	63.0
1.80V	1224.8	920.4	612.3	291.2	238.3	199.4	141.9	118.0	62.4

### Cycle service life



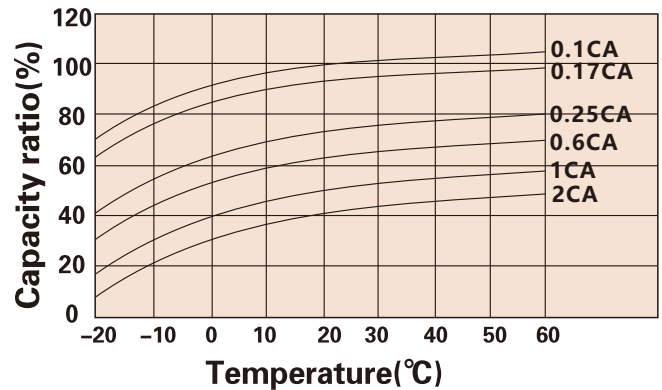
### Trickle(or float) service life



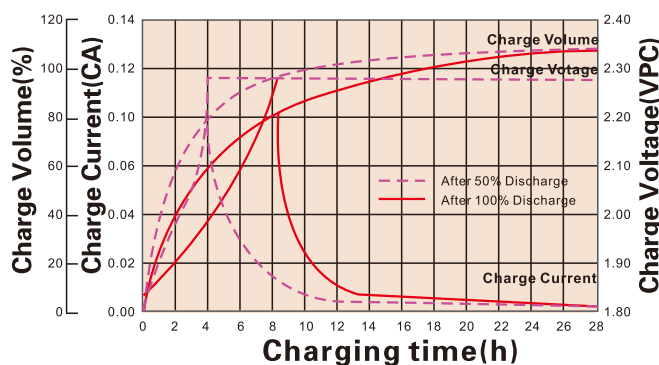
### Storage time(months)



### Temperature and discharge capacity



### Charging characteristic



Storage Temperature	Supplementary Charge Interval	Charge Method
≤20°C	Every 12 months	Less or 24 hours with a constant voltage of 2.3V/cell
20-30°C	Every 8 months	12-18 hours with a constant voltage of 2.45V/cell
≥30°C	Storage to be avoided	8-12 hours with a constant current of 0.05CA

## APPLICATIONS

#### Standby Usage:

- UPS
- Emergency Lights
- Alarm Systems
- Telecommunication Systems

#### Cyclic Usage:

- Medical Equipments
- Electric Instruments
- Toys
- Camcorder and Solar Systems

#### Motive Usage:

- Golf Cars
- Wheelchairs
- Lawnmowers
- Motorcycle

(Note) All above information shall be changed without prior notice, Shimastu reserves the right to explain and update the latest information.