



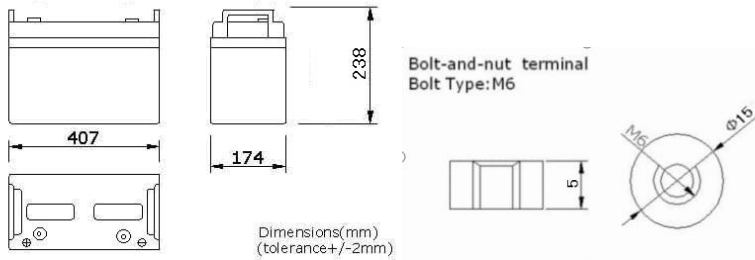
GEL120-12(12V120AH)



PHYSICAL SPECIFICATION



Nominal Voltage		12V
Nominal Capacity (10HR)		120Ah
Dimension	Length	407±2mm (16.02 inches)
	Width	174±2mm (6.85 inches)
	Container Height	238±2mm (9.37 inches)
	Total Height	238±2mm (9.37 inches)
Weight		Approx. 35.5Kg ±3% (78.26lbs)
Standard Terminal		Bolt-and-nut terminal Bolt Type: M6



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

Features:

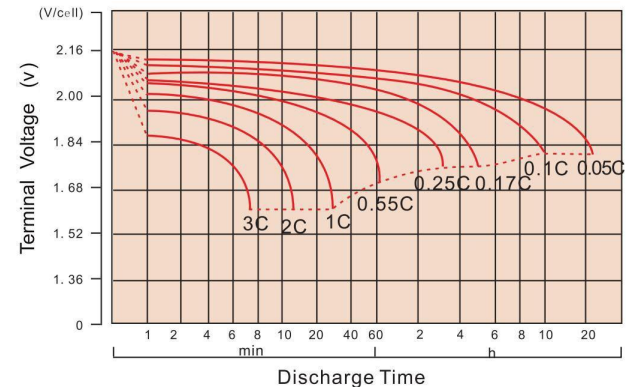
- 1.Special polar plate design, which ensures a designed floating charge life of 15 years at 25°C (77 °F)
- 2.Equalized current distribution, the active material is not easy to fall off
- 3.High gas recombination efficiency
- 4.Good deep discharge resilience performance
- 5.No delamination phenomena in the electrolyte
- 6.Manufactured with high-porosity

ELECTRICAL SPECIFICATION

Characteristics

Discharge curves @ 25°C (77 °F)

Capacity	10 hour rate (12A)	120Ah
	5 hour rate (20.4A)	102Ah
	3 hour rate (30A)	90Ah
	1 hour rate (66A)	66Ah
Capacity affected by temperature	40°C (104 °F)	102%
	25°C (77 °F)	100%
	0°C (32 °F)	85%
Max Discharge Current	1200A(5 Sec)	
Short Circuit Current	2220A	
Internal Resistance	Full charged battery (25°C, 77 °F) 5.2mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 30A Voltage 14.1~14.4V at 25°C (77 °F) Temperature Coefficient -30mV/°C
	Standby	No limit on Initial Charging Current Voltage 13.5~13.8V at 25°C (77 °F) Temperature Coefficient -20mV/°C



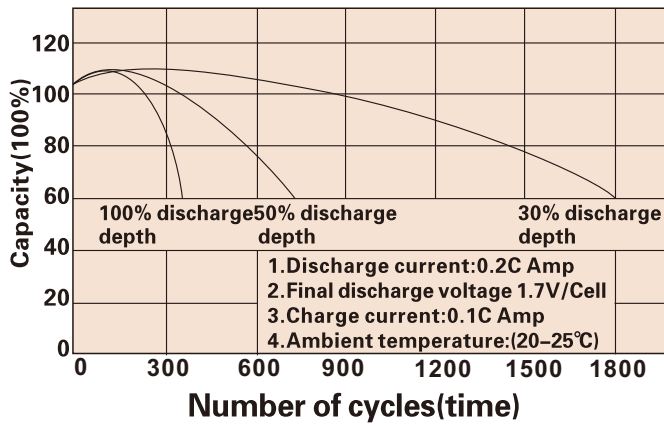
CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	10MIN	15MIN	30MIN	1HR	3HR	5HR	8HR	10HR	20HR
1.60V	280.7	220.1	131.3	74.4	34.0	22.7	15.3	12.7	6.62
1.65V	258.1	210.4	126.1	71.6	32.9	22.1	15.1	12.5	6.53
1.70V	237.6	197.1	120.6	68.9	32.0	21.5	14.8	12.3	6.44
1.75V	217.5	183.5	115.2	66.0	31.0	21.0	14.6	12.2	6.36
1.80V	196.9	169.4	110.2	63.6	30.0	20.4	14.4	12.0	6.30

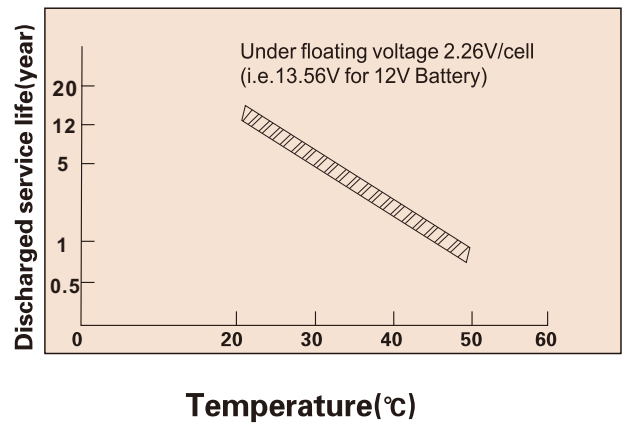
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	10MIN	15MIN	30MIN	1HR	3HR	5HR	8HR	10HR	20HR
1.60V	464.4	384.8	238.6	139.9	64.8	43.9	30.0	25.1	13.0
1.65V	447.3	373.3	231.5	135.3	63.1	42.7	29.5	24.7	12.8
1.70V	419.3	354.8	223.5	131.0	61.6	41.8	29.1	24.3	12.7
1.75V	390.7	335.1	215.6	126.3	60.1	40.9	28.7	24.0	12.6
1.80V	359.8	313.9	208.4	122.4	58.2	39.9	28.4	23.6	12.5

Cycle service life



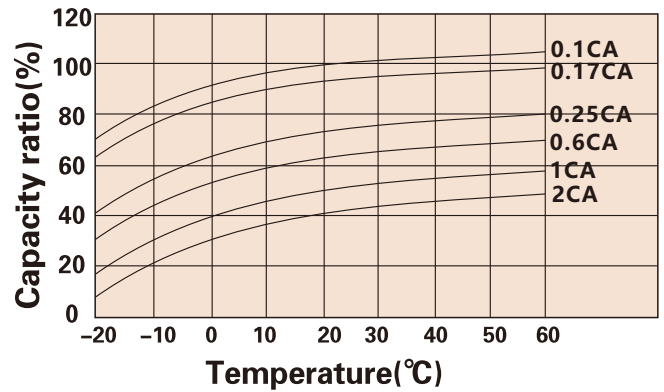
Trickle(or float) service life



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.