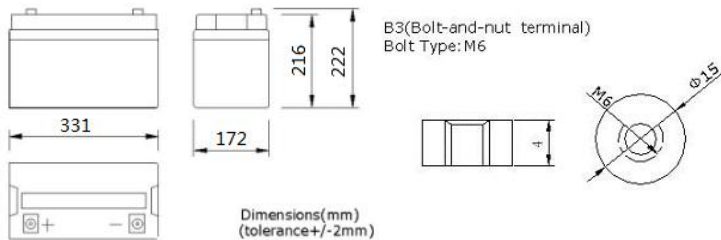


PHYSICAL SPECIFICATION



Nominal Voltage		12V
Nominal Capacity (10HR)		100Ah
Dimension	Length	331±2mm (13.03 inches)
	Width	172±2mm (6.77 inches)
	Container Height	216±2mm (8.50 inches)
	Total Height	222±2mm (8.74 inches)
Weight		Approx. 31.5Kg ±3% (69.43lbs)
Standard Terminal		Bolt-and-nut terminal Bolt Type: M6



Shimastu NPH series High-Rate Discharge Batteries are suitable for high-power discharge by using strong grids and specially designed active material, it offers 20% more power output than the standard range, suitable for UPS/EPs, data centers where high current loads are required.

Features:

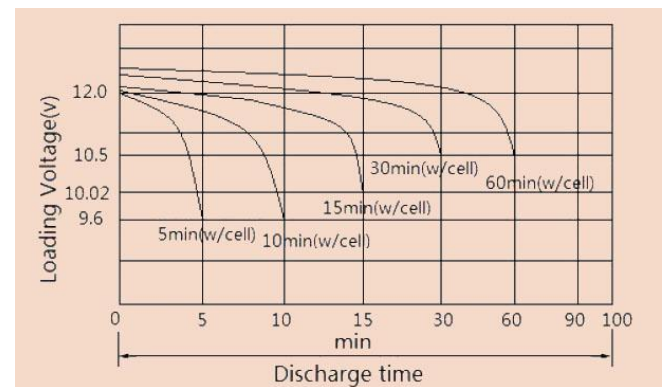
1. Extremely low self-discharge by using high pure material, allowing for a long rest period
2. High quality Adsorbed glass fiber separators, with a gas recombination efficiency of 99%, no need for replenishment with water
3. Long design life up to 10 years in float service at 25°C
4. PbCaSn alloy for plate grids, suitable for high-power discharge

ELECTRICAL SPECIFICATION

Characteristics

Capacity	15 min wattage @1.67vpc 10 hour rate(10A,10.8V) 20 hour rate(5.3A,10.8V)	420W/cell 100Ah 106Ah
Capacity affected by temperature	40°C (104 °F) 25°C (77 °F) 0°C (32 °F)	102% 100% 85%
Max Discharge Current	1100A(5 Sec)	
Short Circuit Current	2310A	
Internal Resistance	Full charged battery (25°C,77 °F) 4.8mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 25A 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

Discharge curves @ 25°C (77 °F)



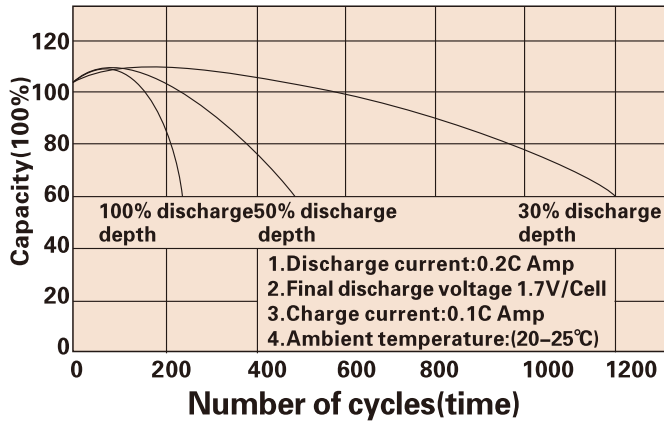
CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	3MIN	5MIN	10MIN	15MIN	20MIN	25MIN	30MIN	45MIN	60MIN
1.60V	466.1	387.2	321.4	239.5	207.6	175.6	152.7	102.8	76.5
1.67V	447.1	371.3	305.4	224.6	186.6	159.7	140.7	99.8	73.4
1.70V	433.1	357.3	293.4	209.6	174.7	150.7	131.7	93.3	71.3
1.75V	418.2	341.3	283.4	199.6	169.7	144.7	125.7	88.0	69.2
1.80V	404.2	327.3	262.5	190.6	163.7	140.7	120.8	85.9	67.1

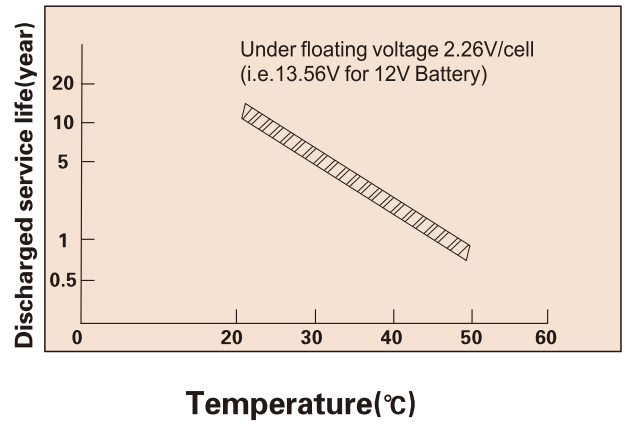
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	3MIN	5MIN	10MIN	15MIN	20MIN	25MIN	30MIN	45MIN	60MIN
1.60V	884.2	744.5	570.9	436.1	364.3	314.4	266.5	190.6	143.7
1.67V	862.3	721.6	551.9	420.0	359.3	301.4	251.5	186.6	140.7
1.70V	847.3	695.6	511.0	394.2	338.3	288.4	250.5	181.6	136.7
1.75V	830.3	662.7	481.0	371.3	322.4	272.5	237.5	171.7	131.7
1.80V	816.4	643.7	464.1	348.3	304.4	260.5	227.5	161.7	124.8

Cycle service life



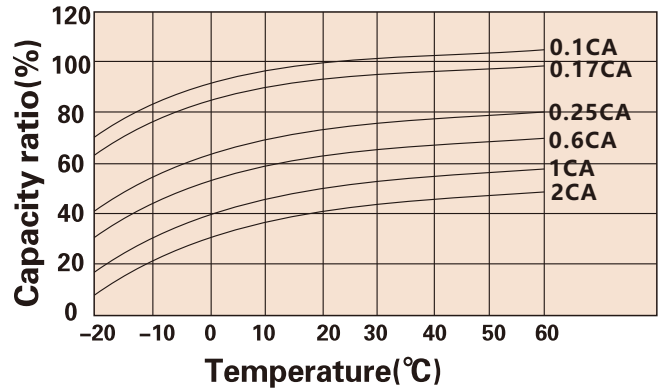
Trickle(or float) service life



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.