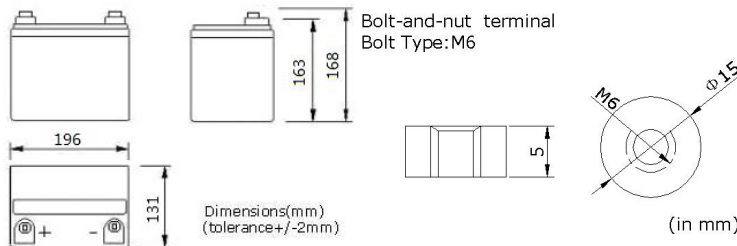


PHYSICAL SPECIFICATION

Nominal Voltage		12V
Nominal Capacity (10HR)		33Ah
Dimension	Length	196±2mm (7.72 inches)
	Width	131±2mm (5.16 inches)
	Container Height	163±2mm (6.42 inches)
	Total Height	168±2mm (6.61 inches)
Weight		Approx. 11.2 Kg ±3% (24.68lbs)
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 8 years in float service at 25°C
4. PbCaSn alloy for plate grids, suitable for high-power discharge

ELECTRICAL SPECIFICATION

Characteristics		Discharge curves @ 25°C (77 °F)		
Capacity	15 min wattage @1.67vpc 10 hour rate(3.3A,10.8V) 20 hour rate(1.75A,10.8V)	150W/cell 33.0Ah 35.0Ah		
Capacity affected by temperature	40°C (104 °F) 25°C (77 °F) 0°C (32 °F)	102% 100% 85%		
Max Discharge Current	360A(5 Sec)			
Short Circuit Current	910A			
Internal Resistance	Full charged battery (25°C,77 °F) 10mΩ			
Constant Voltage Charge	Cycle	Initial Charging Current less than 8.2A 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	3MIN	5MIN	10MIN	15MIN	20MIN	25MIN	30MIN	45MIN	60MIN
1.60V	233.5	172.7	115.8	86.8	71.3	60.9	52.8	38.5	30.2
1.67V	208.6	157.7	108.8	81.8	68.3	58.3	50.5	37.2	29.9
1.70V	193.6	148.7	103.8	79.8	66.3	57.0	49.8	36.7	29.7
1.75V	174.7	136.7	97.8	75.8	63.9	54.7	47.9	35.3	29.1
1.80V	157.7	123.8	90.8	70.9	59.9	51.1	44.9	33.8	28.0

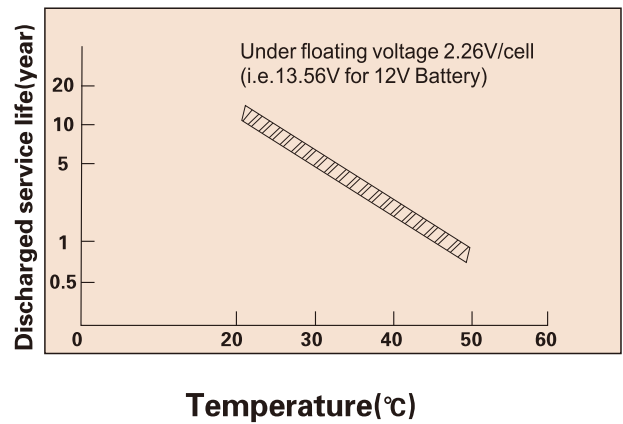
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	3MIN	5MIN	10MIN	15MIN	20MIN	25MIN	30MIN	45MIN	60MIN
1.60V	345.3	266.5	196.6	151.7	130.7	112.8	100.8	74.1	58.4
1.67V	327.3	258.5	188.6	150.0	127.7	109.8	97.8	73.0	58.2
1.70V	316.4	247.5	182.6	145.7	125.7	107.8	93.8	71.8	58.0
1.75V	292.4	233.5	170.7	136.7	118.8	103.8	91.8	69.9	56.6
1.80V	286.4	223.6	163.7	130.7	114.8	99.8	88.8	67.3	54.6

Cycle service life



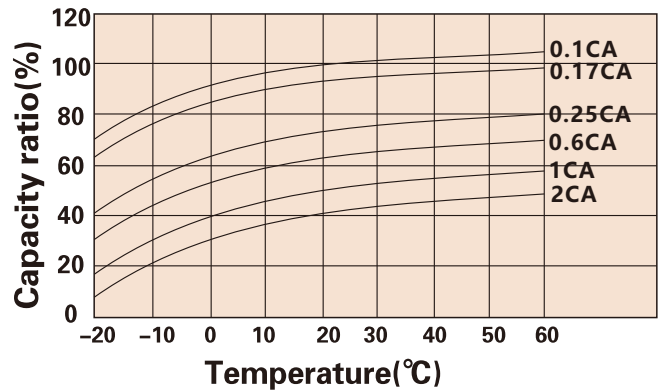
Trickle(or float) service life



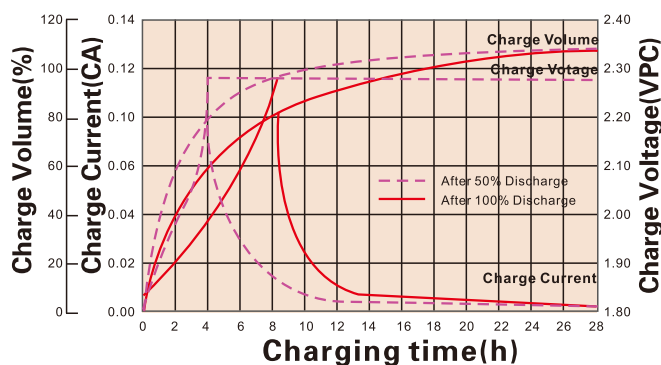
Storage time(months)



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.