valve regulated
sealed lead acid type
rechargeable battery

sun battery©

SB12-250(12V250AH)

Specification

Nomial Voltage	12V	
Nomial Capacity(10HR)	250.0AH	
Dimension	Length	522±3mm (20.55 inches)
	Width	268±2mm (10.55 inches)
	Container Height	220±2mm (8.66 inches)
	Total Height (with Terminal)	226±2mm (8.90 inches)
Approx Weight	Approx 77.0 Kg (169.8 lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	287.5 AH/2.88A	(100hr,1.80V/cell,25°C/77°F)
	262.0 AH/13.1A	(20hr,1.80V/cell,25°C/77°F)
	250.0 AH/25.0A	(10hr,1.80V/cell,25°C/77°F)
	218.0 AH/43.6A	(5hr,1.75V/cell,25°C/77°F)
	151.9 AH/151.9A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	2500A (5s)	
Internal Resistance	Approx 2.5mΩ	
Operating Temp.Range	Discharge : -15~50°C (5~122°F) Charge : 0~40°C (32~104°F) Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 75.0A.Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	SB series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	
Life expectancy	8~12years at 25 C with charge voltage 2.25V/cell.	

Applications

- *All purpose*
- *Uninterruptable Power Supply (UPS)*
- *Electric Power System (EPS)*
- *Emergency backup power supply*
- *Emergency light*
- *Railway signal*
- *Aircraft signal*
- *Alarm and security system*
- *Electronic apparatus and equipment*
- *Communication power supply*
- *DC power supply*
- *Auto control system*

Intertek ETL SEMKO MH45680
ISO9001 ISO14001

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	427.9	336.4	286.1	239.3	190.2	143.9	117.9	75.1	59.4	48.5	39.1	34.0	27.6	23.6	12.88
1.80V/cell	/	429.8	345.7	282.9	224.4	167.4	132.0	81.9	63.9	51.8	42.0	36.5	29.3	25.0	13.00
1.75V/cell	/	472.3	377.6	304.3	233.0	173.7	138.1	85.0	65.1	52.9	43.0	37.5	29.8	25.3	13.13
1.70V/cell	/	/	403.1	319.8	242.5	180.7	142.5	88.4	66.9	54.3	44.2	38.3	30.2	25.5	13.38
1.65V/cell	/	/	428.6	339.7	255.8	185.2	147.3	90.8	69.7	56.2	45.4	39.1	30.7	26.0	13.55
1.60V/cell	/	/	458.4	361.9	270.1	193.0	152.5	93.9	71.9	58.0	46.9	40.0	31.0	26.3	13.63

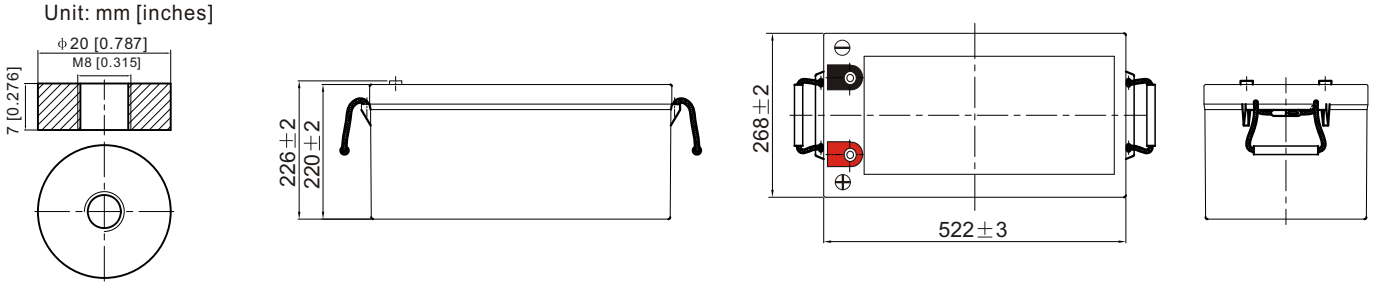
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	782.3	621.4	533.8	451.0	362.5	276.7	227.3	145.8	115.7	94.8	76.6	66.9	54.5	46.7	25.5
1.80V/cell	/	784.6	636.3	525.3	421.2	319.3	253.3	158.0	123.8	100.7	81.9	71.5	57.7	49.4	25.7
1.75V/cell	/	848.3	686.5	559.7	433.6	328.2	263.8	163.3	125.6	102.6	83.8	73.2	58.5	49.8	25.9
1.70V/cell	/	/	722.7	583.8	448.8	340.0	271.2	169.4	128.9	105.1	85.7	74.6	59.3	50.3	26.4
1.65V/cell	/	/	762.6	615.6	469.6	345.4	278.3	173.2	133.7	108.3	87.8	76.0	60.1	51.2	26.7
1.60V/cell	/	/	802.1	648.6	492.3	358.0	286.7	178.1	137.2	111.3	90.4	77.4	60.5	51.7	26.8

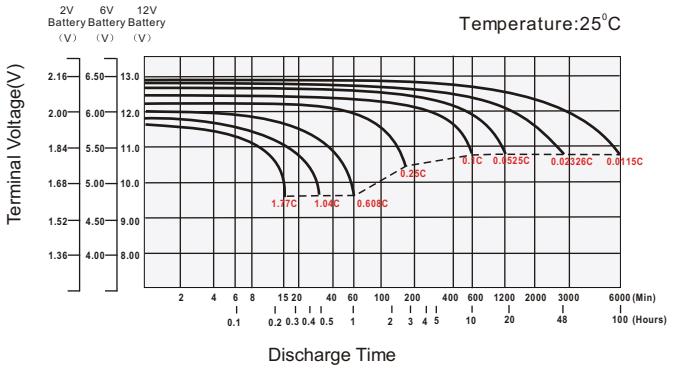
Dimensions

T11 Terminal

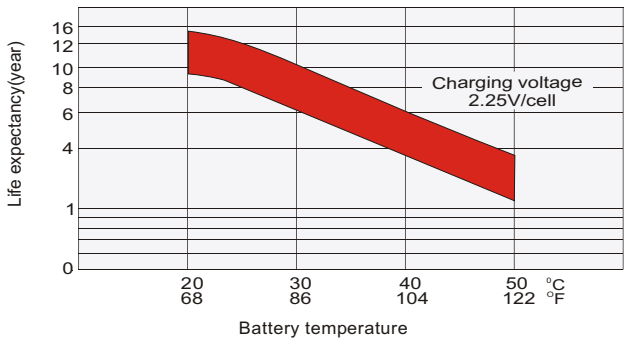
Unit: mm [inches]



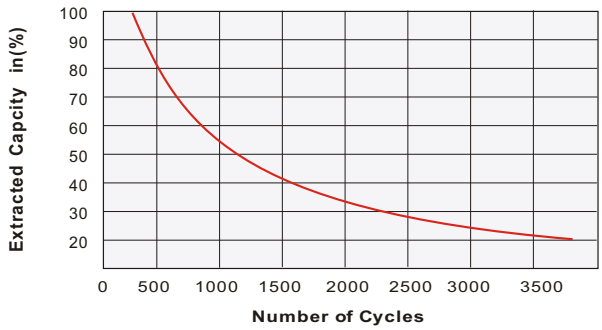
Discharge Characteristics



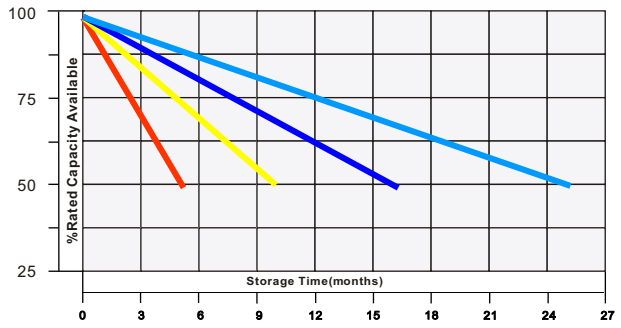
Effect of Temperature on Long Term Float Life

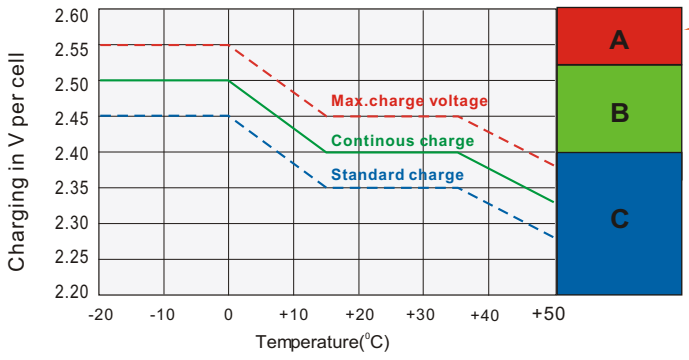


Cycle Service Life



Self-Discharge at Different Temperatures





Charge Mode

A With switch regulator (two-step controller) charge on curve max.charge voltage for max.2 hrs/day then switch over to continous charge

B Standard charge without switching

C Boost charge (Equalizing charge with external generator) charge on curve continous charge for max. 5 hrs/month, then switch over to curve Standard charge