



valve regulated
sealed lead acid type
rechargeable battery

sunbattery®

SB12-65(S)(12V65AH) (SB12-65(S)V0)



Specification	
Nominal Voltage	12V
Nominal Capacity(20HR)	65.0AH
Dimensions	Length 260±3mm (10.24 inches)
	Width 168±2mm (6.60 inches)
	Container Height 173±3mm (6.81 inches)
	Total Height (with Terminal) 179±3mm (7.05 inches)
	Approx Weight 19.0 kg (41.9 lbs)
Terminal	T6
Container Material	ABS Standard ABS UL94 HB Optional ABS UL94 V0
Rated Capacity	65.0 AH/3.25A (20hr, 1.80V/cell, 25°C/77°F)
	61.0 AH/6.10A (10hr, 1.80V/cell, 25°C/77°F)
	51.5 AH/10.3A (5hr, 1.75V/cell, 25°C/77°F)
	46.8 AH/15.6A (3hr, 1.75V/cell, 25°C/77°F)
	36.6 AH/36.6A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	720A (5s)
Internal Resistance	Approx 7.3mΩ
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 18.0A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Standby Use	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Capacity affected by Temperature	SUN 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.
Self Discharge	8 years at 25°C with charge voltage 2.25V/cell.
Life expectancy	13,9kg
Lead Content	

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



Conform to:
IEC60896-21&22 and/or IEC61427

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	102.7	80.7	68.7	57.4	45.6	34.5	28.3	18.0	14.2	11.6	9.38	8.17	6.63	5.66	3.19
1.80V/cell	137.8	103.2	83.0	67.9	53.9	40.2	31.7	19.7	15.3	12.4	10.1	8.76	7.03	6.10	3.25
1.75V/cell	155.4	113.4	90.6	73.0	55.9	41.7	33.2	20.4	15.6	12.7	10.3	9.00	7.15	6.16	3.28
1.70V/cell	171.1	123.5	96.7	76.7	58.2	43.4	34.2	21.2	16.1	13.0	10.6	9.19	7.25	6.22	3.31
1.65V/cell	188.7	133.3	102.9	81.5	61.4	44.4	35.3	21.8	16.7	13.5	10.9	9.39	7.37	6.25	3.35
1.60V/cell	208.2	144.8	110.0	86.9	64.8	46.3	36.6	22.5	17.2	13.9	11.3	9.59	7.44	6.31	3.37

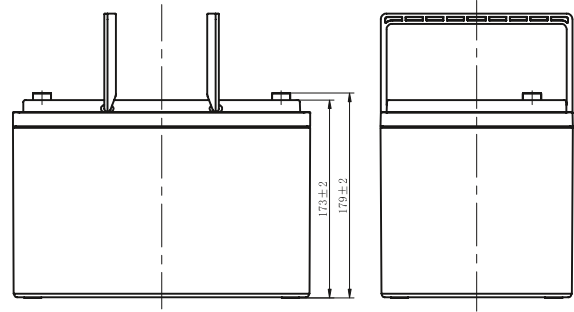
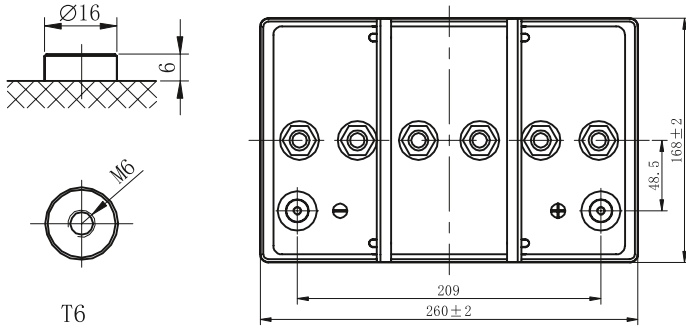
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	187.8	149.1	128.1	108.2	87.0	66.4	54.6	35.0	27.8	22.7	18.4	16.1	13.1	11.2	6.32
1.80V/cell	249.3	188.3	152.7	126.1	101.1	76.6	60.8	37.9	29.7	24.2	19.7	17.2	13.8	11.9	6.43
1.75V/cell	275.2	203.6	164.8	134.3	104.1	78.8	63.3	39.2	30.1	24.6	20.1	17.6	14.0	12.0	6.48
1.70V/cell	294.6	216.9	173.5	140.1	107.7	81.6	65.1	40.7	30.9	25.2	20.6	17.9	14.2	12.1	6.54
1.65V/cell	320.2	231.9	183.0	147.7	112.7	82.9	66.8	41.6	32.1	26.0	21.1	18.2	14.4	12.3	6.61
1.60V/cell	345.1	246.0	192.5	155.7	118.2	85.9	68.8	42.7	32.9	26.7	21.7	18.6	14.5	12.4	6.64

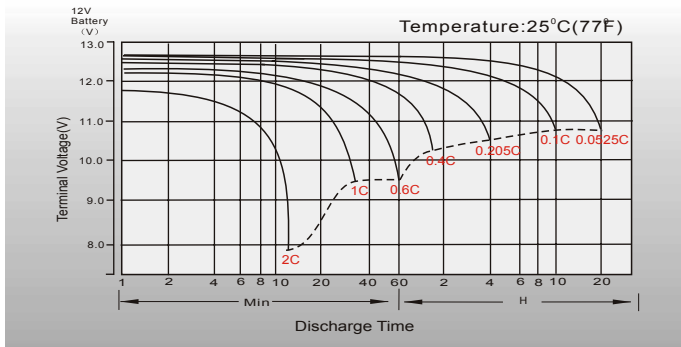


Specifications subject to change without notice. Updated: 13.02.2020

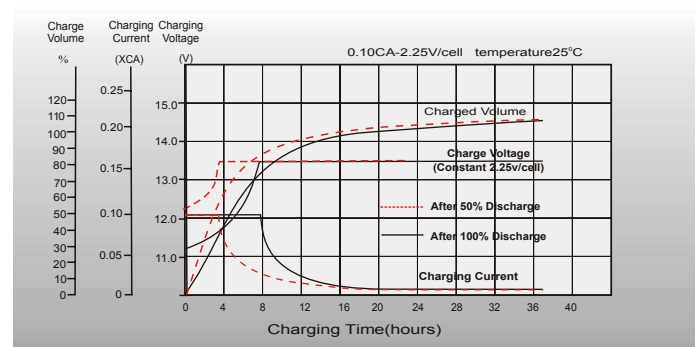
Dimensions



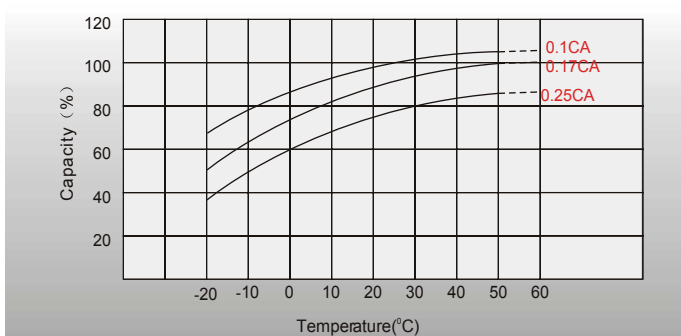
Discharge Characteristics



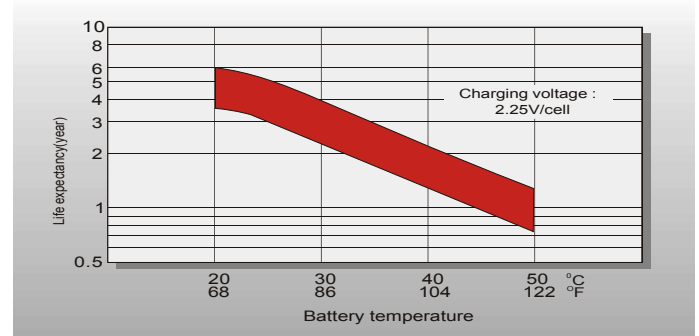
Float Charging Characteristics



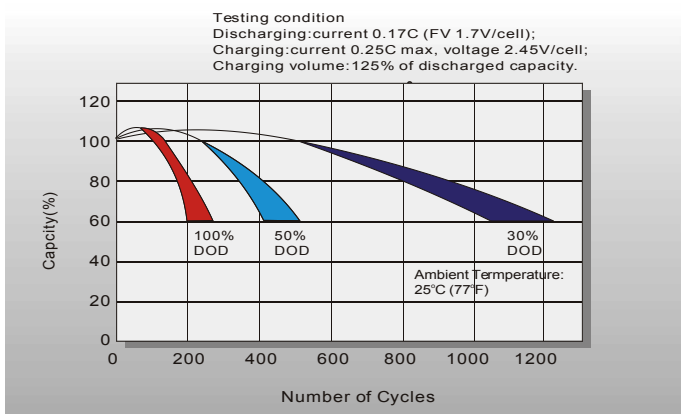
Temperature Effects in Relation to Battery Capacity



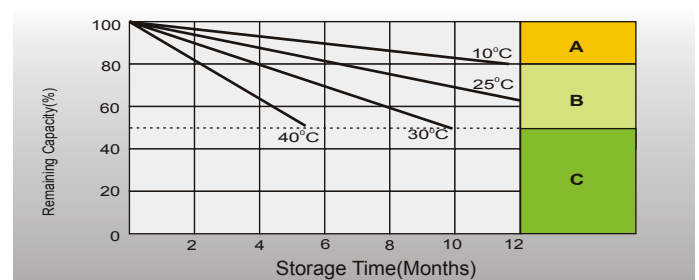
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.