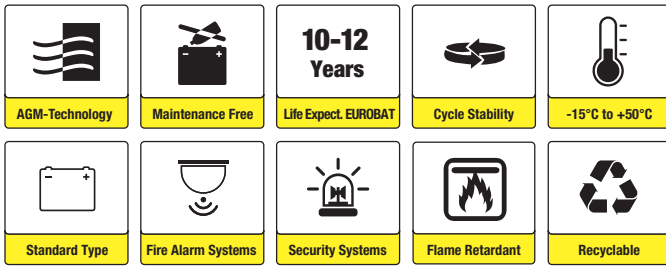




⊕⊖ **sunbattery**®

# SB12-100V0 (12V100Ah)



## Applications

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Alarm and security system
- Communication power supply
- DC power supply

## Certificates



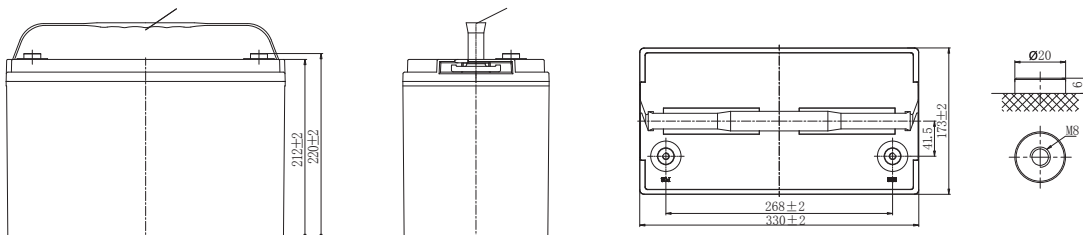
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	100Ah (C <sub>20</sub> , 1.80V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 30.0A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	32.0kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	M8	<b>Capacity affected by Temp.</b>	40°C            103% 25°C            100% 0°C              86%
<b>Container Material</b>	ABS UL94 V0	<b>Self Discharge</b>	SB batteries may be stored for up to 6 months at 25°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
<b>Rated Capacity (25°C)</b>	100.0Ah/5.00A, 20hr, 1.80V/cell 100.0Ah/10.0A, 10hr, 1.80V/cell 94.5Ah/18.9A, 5hr, 1.75V/cell 86.1Ah/28.7A, 3hr, 1.75V/cell 75.7Ah/75.7A, 1hr, 1.60V/cell	<b>Life Expectancy</b>	10-12 years according to EUROBAT
<b>Max. Discharge Current</b>	1000A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 4.9mΩ		
<b>Operating Temp. Range</b>	Discharge:    -15~50°C Charge:        0~40°C Storage:       -15~40°C		

## Dimensions

### ■ M8 Terminal

Unit: mm | Dimensions: 330 Length X 173 Width X 212 Height (220 Height incl. Terminal)





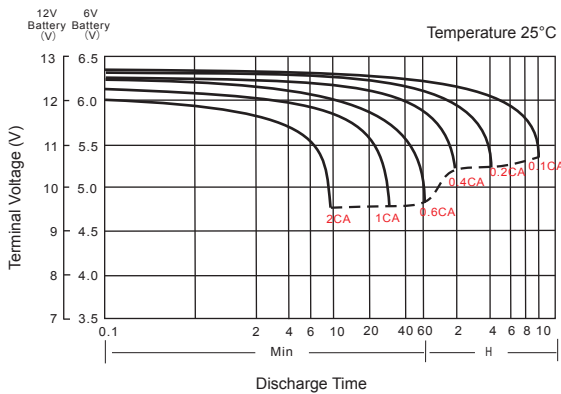
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	138.1	124.6	109.3	92.9	69.4	58.5	37.2	26.2	21.2	17.2	15.1	11.3	9.7	4.80
1.80V/cell	176.5	150.5	129.2	103.6	77.8	63.7	40.0	28.2	22.7	18.4	16.2	11.9	10.0	5.00
1.75V/cell	193.9	164.5	139.0	111.4	83.8	68.5	42.0	28.7	23.2	18.9	16.6	12.3	10.3	5.40
1.70V/cell	211.4	175.5	146.0	116.0	87.1	70.8	43.8	29.5	23.8	19.4	16.9	12.8	10.7	5.63
1.65V/cell	228.1	186.6	155.1	122.3	89.3	73.1	44.9	30.8	24.6	19.9	17.3	13.2	11.0	5.80
1.60V/cell	247.7	199.6	165.2	129.1	93.1	75.7	46.5	31.7	25.4	20.6	17.7	13.4	11.2	5.89

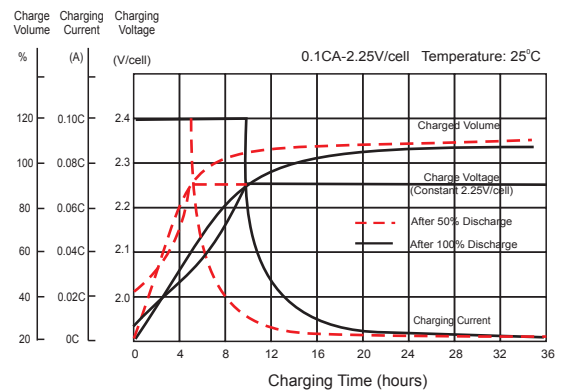
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10	20h
1.85V/cell	257.9	235.0	208.1	178.8	134.8	114.1	72.9	51.6	41.9	34.0	29.9	22.5	19.4	10.3
1.80V/cell	325.7	280.1	242.4	196.5	149.9	123.5	77.9	55.2	44.5	36.3	32.0	23.7	20.0	10.7
1.75V/cell	352.2	302.3	258.3	209.6	160.0	132.3	81.6	56.0	45.5	37.2	32.7	24.4	20.5	11.0
1.70V/cell	375.3	318.2	269.5	217.0	165.8	136.1	84.7	57.5	46.5	38.0	33.4	25.4	21.3	11.2
1.65V/cell	401.4	335.9	284.2	227.0	168.4	139.7	86.7	59.7	47.9	39.0	34.0	26.1	21.9	11.6
1.60V/cell	425.9	353.3	299.4	238.0	174.6	143.9	89.1	61.2	49.3	40.1	34.6	26.4	22.2	11.7

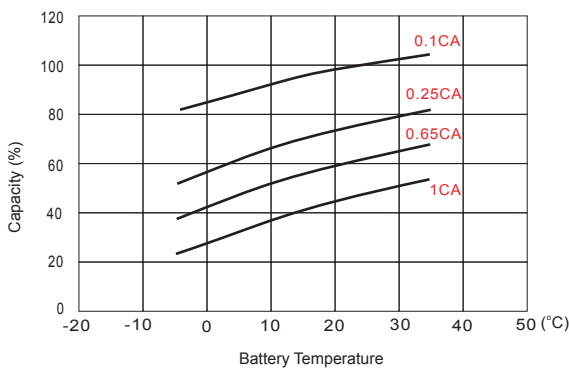
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

