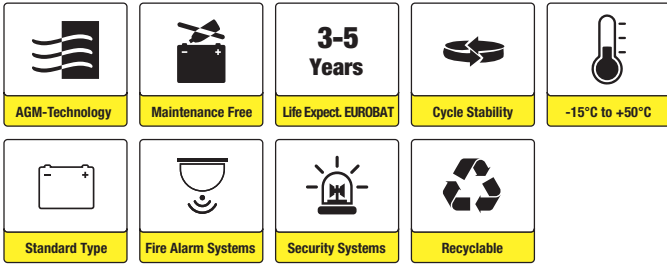




⊕⊖ sunbattery®

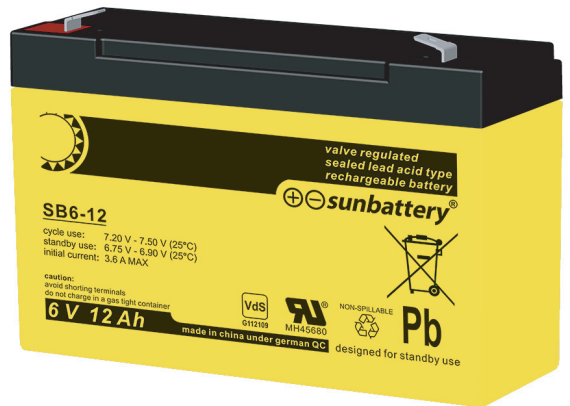
# SB6-12/SB6-12V0 (6V12Ah)



## 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

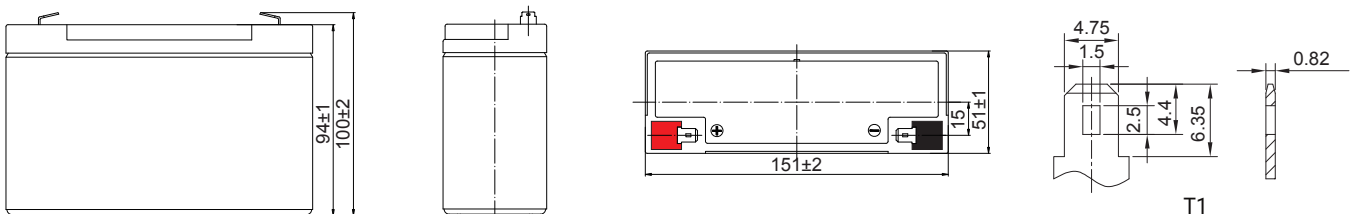


## Specifications

<b>Nominal Voltage</b>	6V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	12Ah (C <sub>20</sub> , 1.80V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 3.6A. Voltage 7.2V~7.5V at 25°C. Temperature Coefficient -10mV/°C.
<b>Approx. Weight</b>	1.95kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 6.75V~6.9V at 25°C Temp. Coefficient -10mV/°C
<b>Terminal</b>	T1	<b>Capacity affected by Temp.</b>	40°C            103% 25°C            100% 0°C              86%
<b>Container Material</b>	ABS UL94 HB/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>	12.0Ah/0.060A, 20hr, 1.80V/cell 11.2Ah/1.12A, 10hr, 1.80V/cell 10.2Ah/2.03A, 5hr, 1.75V/cell 8.94Ah/2.98A, 3hr, 1.75V/cell 7.49Ah/7.49A, 1hr, 1.60V/cell	<b>Life Expectancy</b>	3-5 years according to EUROBAT
<b>Max. Discharge Current</b>	180A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 15mΩ		
<b>Operating Temp. Range</b>	Discharge:    -15~50°C Charge:        0~40°C Storage:       -15~40°C		

## Dimensions

- **T1 Terminal**  
Unit: mm [inches]





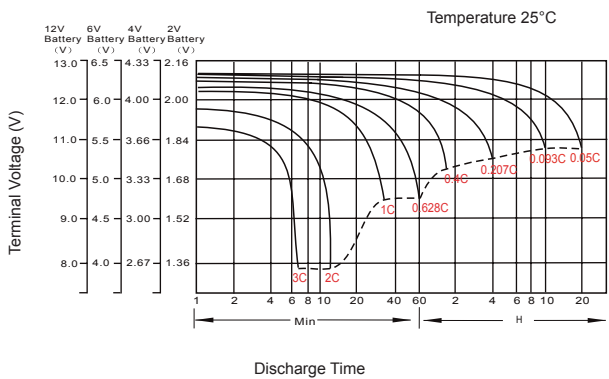
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	22.9	15.2	12.5	11.0	9.02	7.04	5.83	3.58	2.70	2.22	1.88	1.63	1.30	1.08	0.594
1.80V/cell	27.4	18.2	14.7	12.6	10.1	7.73	6.31	3.84	2.88	2.36	1.98	1.70	1.34	1.12	0.600
1.75V/cell	32.8	20.9	16.4	13.9	10.8	8.27	6.67	4.00	2.98	2.42	2.03	1.75	1.38	1.14	0.606
1.70V/cell	38.1	23.3	18.0	15.1	11.5	8.67	6.96	4.14	3.05	2.47	2.08	1.79	1.40	1.16	0.617
1.65V/cell	42.0	25.3	19.3	16.2	12.1	9.06	7.20	4.27	3.14	2.54	2.12	1.82	1.42	1.18	0.625
1.60V/cell	46.3	27.4	20.8	17.1	12.8	9.42	7.49	4.38	3.21	2.60	2.17	1.86	1.45	1.20	0.629

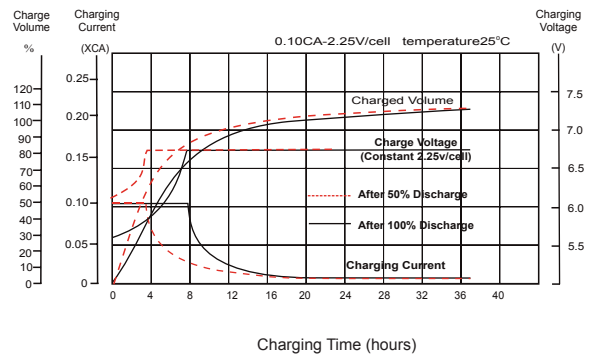
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	42.6	28.4	23.6	20.8	17.1	13.5	11.3	6.96	5.26	4.33	3.69	3.20	2.56	2.14	1.18
1.80V/cell	49.5	33.4	27.2	23.6	19.0	14.7	12.1	7.41	5.58	4.59	3.86	3.33	2.65	2.21	1.19
1.75V/cell	58.8	37.9	30.0	25.8	20.2	15.7	12.7	7.69	5.75	4.68	3.95	3.42	2.71	2.26	1.20
1.70V/cell	67.3	41.7	32.7	27.8	21.4	16.3	13.2	7.94	5.88	4.78	4.04	3.48	2.75	2.29	1.22
1.65V/cell	73.1	44.6	34.7	29.5	22.4	16.9	13.6	8.17	6.02	4.88	4.11	3.54	2.79	2.32	1.23
1.60V/cell	79.2	47.5	36.6	30.6	23.3	17.5	14.1	8.33	6.13	4.99	4.18	3.61	2.84	2.35	1.24

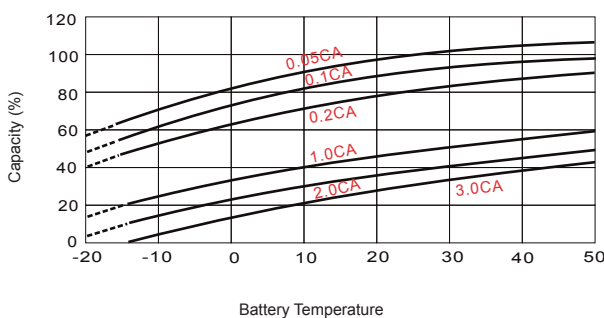
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

