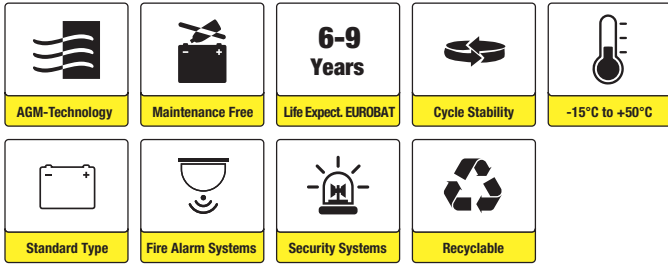




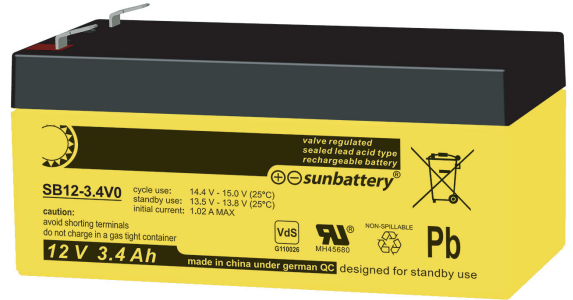
⊕⊖ sunbattery®



# SB12-3.4/SB12-3.4V0 (12V3.4Ah)

## 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

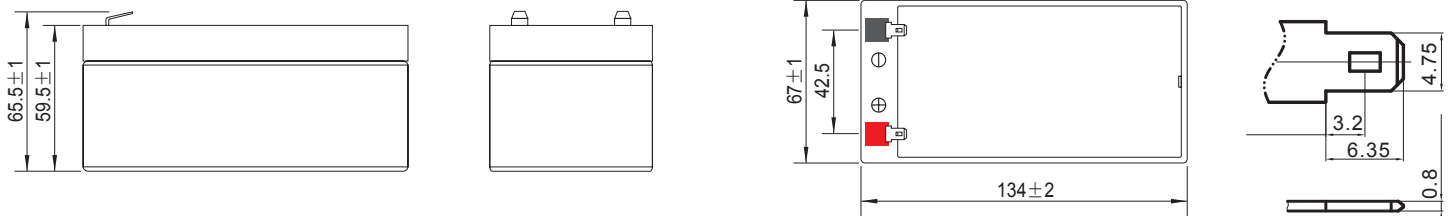


## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	3.4Ah (C <sub>20</sub> 1.80V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 1.02A. Voltage 14.4V~15.0V at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	1.35kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°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>	3.40 Ah/0.170A, 20hr, 1.80V/cell 3.16 Ah/0.316A, 10hr, 1.80V/cell 2.89 Ah/0.578A, 5hr, 1.75V/cell 2.60 Ah/0.867A, 3hr, 1.75V/cell 2.14 Ah/2.14A, 1hr, 1.60V/cell	<b>Life Expectancy</b>	6-9 years according to EUROBAT
<b>Max. Discharge Current</b>	51A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 45mΩ		
<b>Operating Temp. Range</b>	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C		

## Dimensions

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





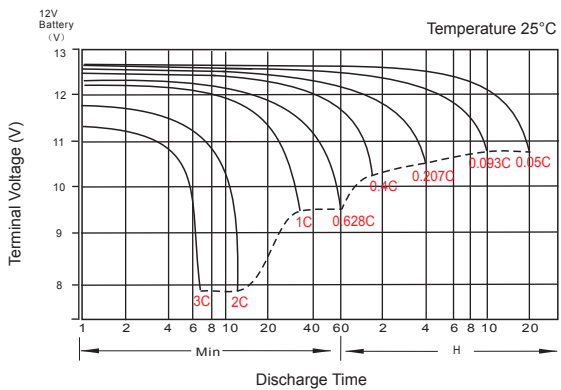
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	6.47	4.97	4.12	3.56	2.75	2.03	1.71	1.01	0.791	0.643	0.525	0.455	0.367	0.307	0.168
1.80V/cell	8.69	6.35	4.98	4.21	3.25	2.36	1.92	1.10	0.851	0.687	0.563	0.488	0.389	0.316	0.170
1.75V/cell	9.80	6.98	5.44	4.53	3.37	2.45	2.00	1.14	0.867	0.702	0.578	0.502	0.396	0.325	0.172
1.70V/cell	10.8	7.61	5.80	4.76	3.51	2.55	2.07	1.17	0.891	0.721	0.593	0.512	0.402	0.331	0.175
1.65V/cell	11.9	8.21	6.17	5.06	3.70	2.61	2.11	1.19	0.929	0.746	0.609	0.523	0.408	0.338	0.177
1.60V/cell	13.1	8.91	6.60	5.39	3.91	2.72	2.14	1.24	0.957	0.769	0.629	0.534	0.412	0.342	0.178

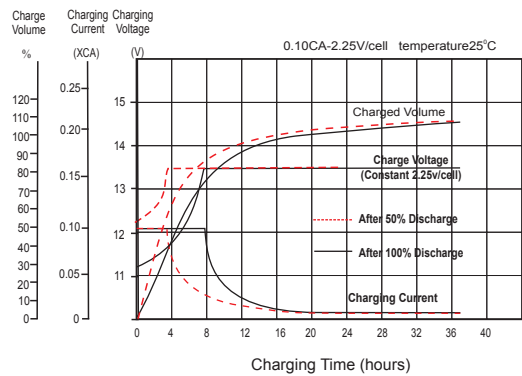
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	11.8	9.18	7.69	6.71	5.25	3.90	3.30	1.96	1.54	1.26	1.03	0.90	0.725	0.607	0.333
1.80V/cell	15.7	11.6	9.16	7.82	6.10	4.50	3.67	2.13	1.65	1.34	1.10	0.96	0.766	0.625	0.336
1.75V/cell	17.3	12.5	9.88	8.33	6.28	4.62	3.83	2.20	1.67	1.36	1.12	0.98	0.778	0.641	0.339
1.70V/cell	18.6	13.4	10.4	8.69	6.50	4.79	3.93	2.25	1.72	1.39	1.15	1.00	0.788	0.653	0.345
1.65V/cell	20.2	14.3	11.0	9.16	6.80	4.87	4.00	2.27	1.78	1.44	1.18	1.02	0.798	0.665	0.349
1.60V/cell	21.8	15.2	11.5	9.65	7.13	5.05	4.01	2.35	1.83	1.48	1.21	1.04	0.805	0.672	0.351

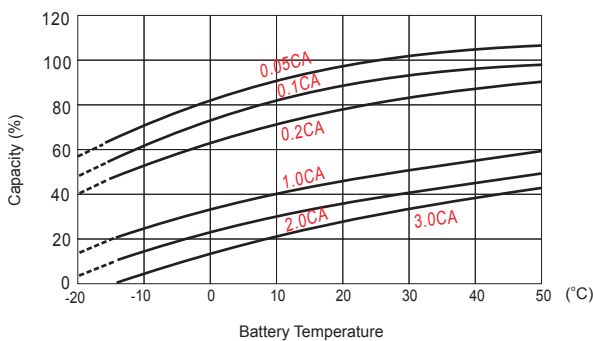
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

