



# SB5-12L (12V5Ah)



## 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



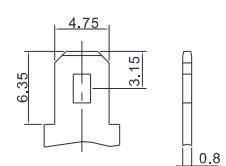
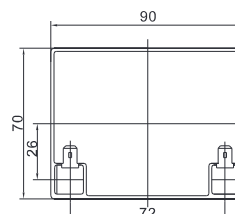
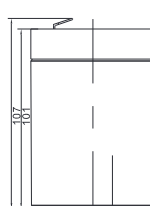
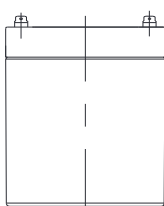
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	20±3°C
<b>Nominal Capacity</b>	5Ah (C <sub>20</sub> , 10.5V)	<b>Cycle Use</b>	Initial Charging Current less than 1.5A. Voltage 14.40V~14.7V at 20°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	1.35kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.38V~13.8V at 20°C. Temperature Coefficient -20mV/°C.
<b>Terminal</b>	T2	<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>	SSB batteries may be stored for up to 6 months at 20°C and then a freshening charge is required. For higher temperatures the time interval will be shorter.
<b>Rated Capacity (20°C)</b>	5.0Ah/0.250A, 20hr, 10.5V 4.67Ah/0.467A, 10hr, 10.8V 4.36Ah/0.872A, 5hr, 10.5V 3.87Ah/1.290A, 3hr, 10.5V 2.75Ah/2.750A, 1hr, 10.5V	<b>Life Expectancy</b>	6-9 years according to EUROBAT
<b>Max. Discharge Current</b>	50A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 42mΩ		
<b>Operating Temp. Range</b>	Discharge:        -20~50°C Charge:            -10~50°C Storage:           -20~50°C		

## Dimensions

### ■ T2 Terminal

Unit: mm | Dimensions: 90 Length X 70 Width X 101 Height (107 Height incl. Terminal)



T2 Terminal



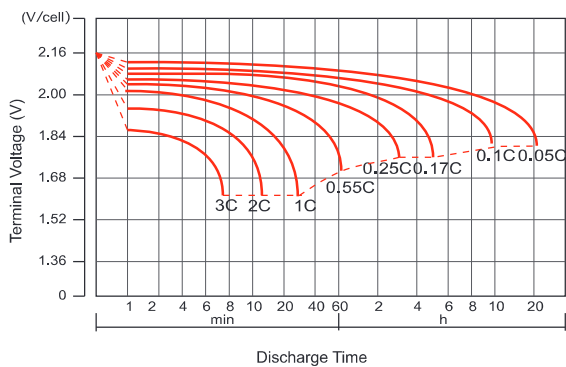
### Constant Current Discharge (Amperes) at 20°C

F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	18.97	13.41	9.692	5.567	3.055	1.876	1.410	1.138	0.943	0.607	0.493	0.260
1.65V/cell	17.64	12.67	9.266	5.344	2.950	1.816	1.366	1.108	0.919	0.600	0.487	0.256
1.70V/cell	15.92	11.66	8.679	5.108	2.854	1.756	1.329	1.077	0.895	0.591	0.480	0.253
1.75V/cell	14.26	10.68	8.076	4.882	2.750	1.695	1.290	1.050	0.872	0.583	0.473	0.250
1.80V/cell	12.52	9.664	7.457	4.666	2.645	1.634	1.250	1.020	0.850	0.573	0.467	0.248
1.85V/cell	9.939	7.898	6.188	4.019	2.372	1.497	1.155	0.948	0.792	0.538	0.440	0.235

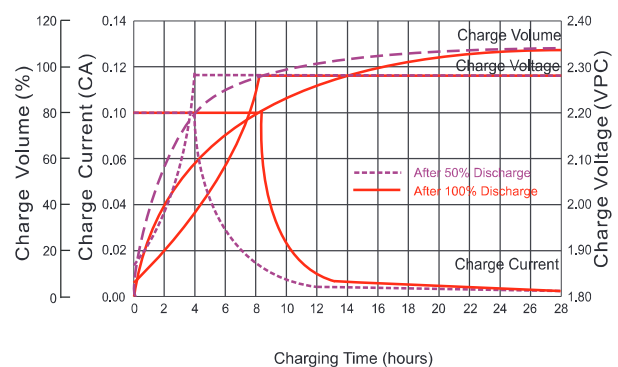
### Constant Power Discharge (Watts/cell) at 20°C

F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V/cell	31.45	22.79	16.94	10.11	5.741	3.555	2.693	2.185	1.818	1.186	0.969	0.513
1.65V/cell	29.58	21.95	16.44	9.809	5.576	3.458	2.621	2.134	1.778	1.175	0.959	0.505
1.70V/cell	27.30	20.58	15.63	9.469	5.428	3.363	2.561	2.084	1.737	1.159	0.945	0.500
1.75V/cell	25.00	19.18	14.75	9.144	5.261	3.260	2.495	2.038	1.699	1.145	0.934	0.494
1.80V/cell	22.42	17.66	13.82	8.828	5.089	3.159	2.427	1.987	1.661	1.128	0.923	0.490
1.85V/cell	18.17	14.69	11.63	7.679	4.593	2.911	2.254	1.854	1.555	1.062	0.871	0.466

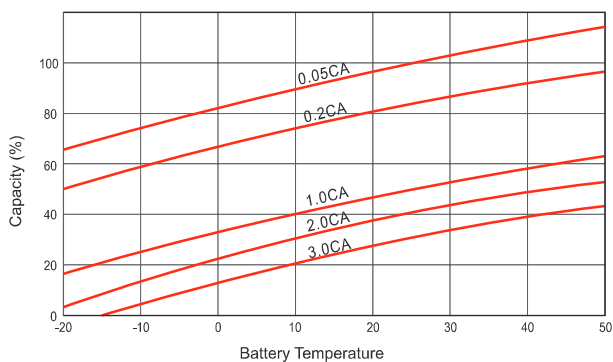
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

