



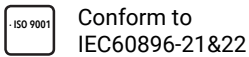
# SBL18-12i (12V18Ah)



## 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 Capacity</b>	18Ah (C <sub>20</sub> , 10.5V)
<b>Approx. Weight</b>	5kg
<b>Terminal</b>	M5
<b>Container Material</b>	ABS UL94 HB
<b>Rated Capacity (20°C)</b>	18.0Ah/0.90A, 20hr, 10.5V 17Ah/1.70A, 10hr, 10.5V 16.72Ah/2.09A, 8hr, 10.5V 15.7Ah/3.14A, 5hr, 10.5V 13.92Ah/4.64A, 3hr, 10.5V 11.0Ah/11.0A, 1hr, 9.6V
<b>Max. Discharge Current</b>	180A (5s)
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 18mΩ
<b>Nominal Oper. Temp. R.</b>	20±2°C

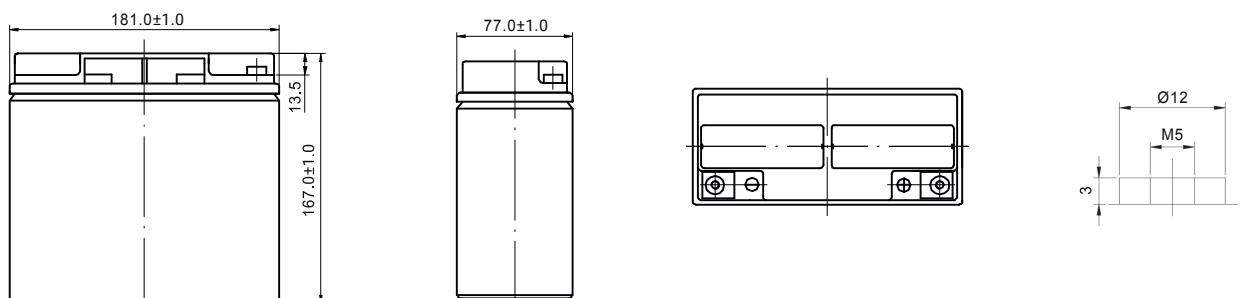
<b>Operating Temp. Range</b>	Discharge: -15~50°C Charge: -20~40°C Storage: -15~40°C
<b>Cycle Use</b>	Initial Charging Current less than 5.4A. Voltage 14.55V +1% at 20°C. Temperature Coefficient -30mV/°C.
<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.74V +1% at 20°C. Temperature Coefficient -20mV/°C.
<b>Capacity affected by Temp.</b>	40°C 103% 25°C 100% 0°C 86%
<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>Life Expectancy</b>	10-12 years according to EUROBAT



## Dimensions

### ■ M5 Terminal

Unit: mm | Dimensions: 181 Length X 77 Width X 167 Height (167 Height incl. Terminal)



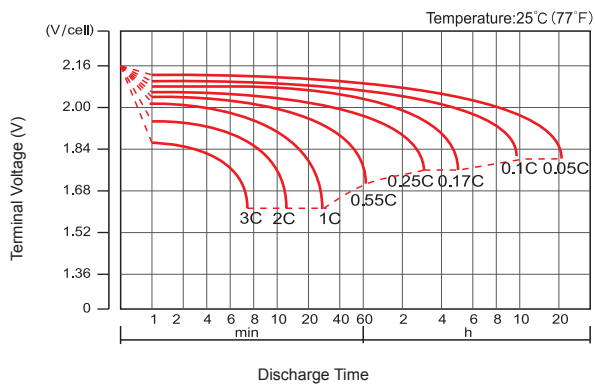
### Constant Current Discharge (Amperes) at 20°C

F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	68.29	48.27	34.89	20.04	11.00	6.752	5.076	4.098	3.395	2.185	1.775	0.937
1.65V	63.51	45.61	33.36	19.24	10.62	6.537	4.919	3.987	3.307	2.161	1.753	0.922
1.70V	57.30	41.99	31.24	18.39	10.27	6.321	4.786	3.879	3.221	2.127	1.727	0.911
1.75V	51.34	38.43	29.07	17.58	9.899	6.101	4.643	3.779	3.140	2.098	1.704	0.900
1.80V	45.08	34.79	26.85	16.80	9.521	5.882	4.499	3.671	3.059	2.062	1.682	0.891
1.85V	35.78	28.43	22.28	14.47	8.539	5.390	4.159	3.412	2.853	1.936	1.584	0.846

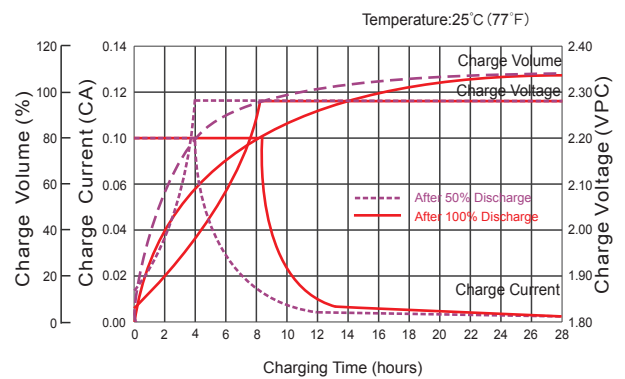
### Constant Power Discharge (Watts/cell) at 20°C

F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	113.2	82.04	61.00	36.40	20.67	12.80	9.695	7.868	6.545	4.268	3.489	1.845
1.65V	106.5	79.02	59.18	35.31	20.07	12.45	9.435	7.683	6.399	4.229	3.451	1.819
1.70V	98.27	74.08	56.26	34.09	19.54	12.11	9.220	7.503	6.254	4.173	3.404	1.799
1.75V	90.00	69.04	53.11	32.92	18.94	11.74	8.983	7.338	6.118	4.123	3.363	1.779
1.80V	80.71	63.58	49.73	31.78	18.32	11.37	8.739	7.153	5.981	4.062	3.324	1.764
1.85V	65.41	52.89	41.86	27.64	16.53	10.48	8.115	6.674	5.596	3.823	3.134	1.677

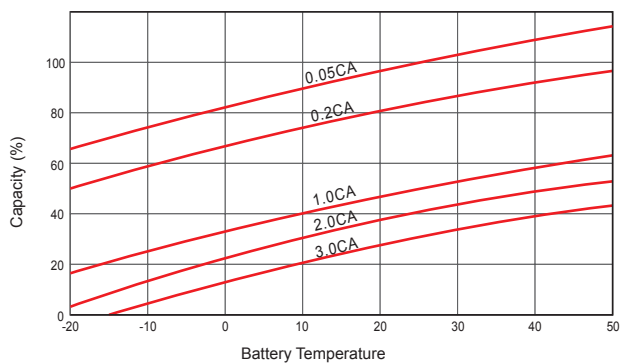
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

