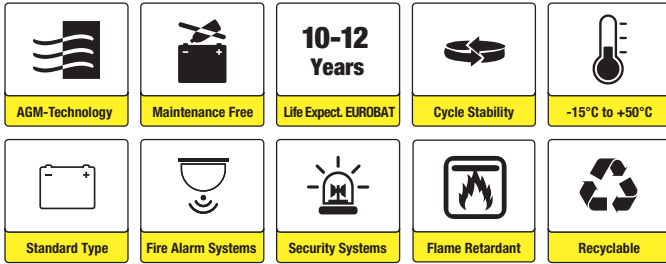




⊕⊖ sunbattery®

# SB12-18V0 (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



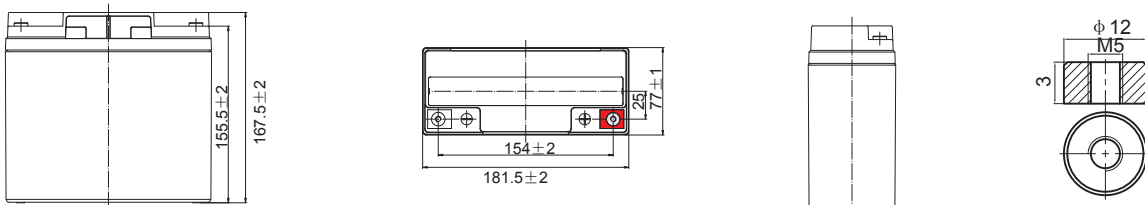
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	18Ah (C <sub>20</sub> , 1.80V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 5.4A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	5.7kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	M5	<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>	18.0Ah/0.90A, 20hr, 1.80V/cell 16.7Ah/1.67A, 10hr, 1.80V/cell 15.1Ah/3.03A, 5hr, 1.75V/cell 13.5Ah/4.49A, 3hr, 1.75V/cell 11.1Ah/11.1A, 1hr, 1.60V/cell	<b>Life Expectancy</b>	10-12 years according to EUROBAT
<b>Max. Discharge Current</b>	112,5A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 16mΩ		
<b>Operating Temp. Range</b>	Discharge:    -15~50°C Charge:        0~40°C Storage:       -15~40°C		

## Dimensions

### ■ M5 Terminal

Unit: mm | Dimensions: 181.5 Length X 77 Width X 167.5 Height (167.5 Height incl. Terminal)





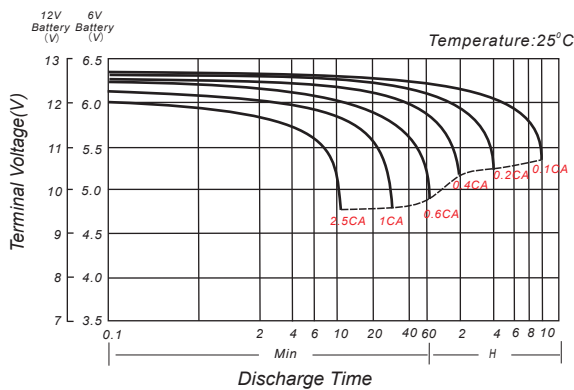
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.9	25.6	22.7	19.9	15.3	11.4	9.11	5.51	4.13	3.35	2.84	2.47	1.96	1.63	0.884
1.80V/cell	40.8	30.2	25.9	22.1	16.7	12.2	9.79	5.85	4.34	3.51	2.94	2.55	2.02	1.67	0.900
1.75V/cell	45.8	33.0	27.8	23.4	17.4	12.8	10.2	6.07	4.49	3.60	3.03	2.62	2.06	1.70	0.918
1.70V/cell	49.9	35.4	29.7	24.7	18.1	13.2	10.6	6.27	4.63	3.69	3.09	2.67	2.09	1.72	0.929
1.65V/cell	53.8	37.7	31.1	25.8	18.9	13.8	10.9	6.44	4.73	3.77	3.14	2.71	2.12	1.74	0.938
1.60V/cell	57.9	39.6	31.9	26.4	19.3	14.0	11.1	6.59	4.82	3.84	3.20	2.74	2.15	1.76	0.945

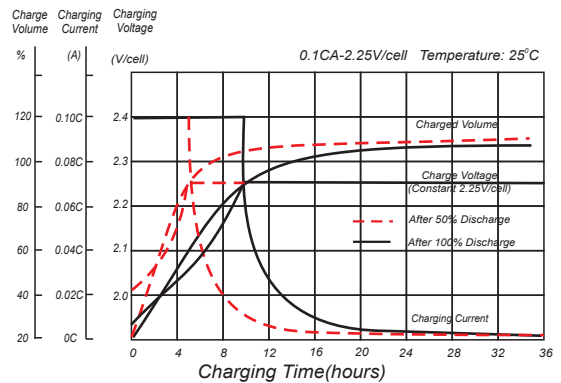
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	64.0	48.8	43.6	38.5	29.8	22.3	17.9	10.9	8.21	6.68	5.68	4.95	3.95	3.29	1.79
1.80V/cell	76.3	57.2	49.5	42.7	32.4	23.9	19.2	11.5	8.59	6.98	5.86	5.09	4.04	3.36	1.81
1.75V/cell	84.8	62.0	52.8	44.8	33.6	24.9	20.0	11.9	8.87	7.14	6.02	5.21	4.11	3.39	1.82
1.70V/cell	91.1	65.6	55.7	46.8	34.7	25.6	20.6	12.2	9.06	7.25	6.08	5.27	4.15	3.42	1.83
1.65V/cell	96.6	68.8	57.5	48.4	35.8	26.3	21.0	12.5	9.19	7.35	6.15	5.32	4.18	3.43	1.84
1.60V/cell	101.5	70.8	58.0	48.7	36.0	26.5	21.3	12.7	9.31	7.45	6.22	5.33	4.21	3.45	1.85

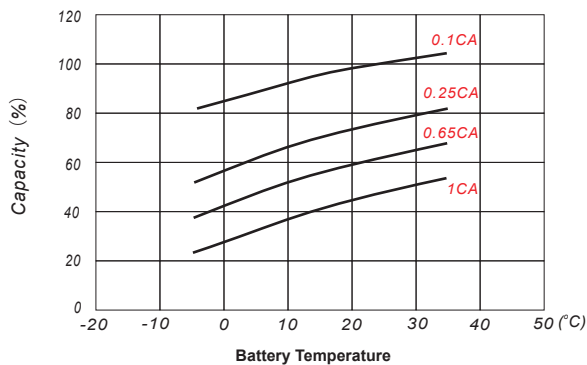
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

