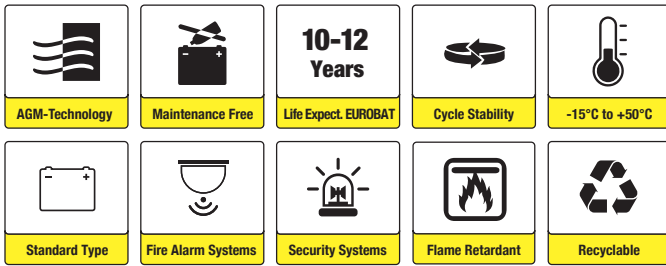




⊕⊖ sunbattery®

# SB12-65SV0 (12V65Ah)



## 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

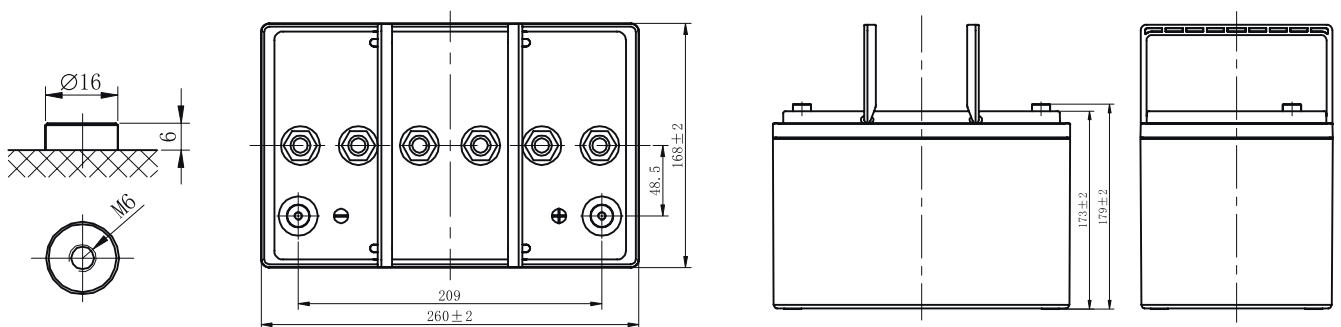


## Specifications

|   |   |                                   |  |
|---|---|-----------------------------------|--|
| <b>Nominal Voltage</b>                        | 12V   | <b>Nominal Oper. Temp. R.</b>     | 25±3°C   |
| <b>Nominal Capacity</b>                       | 65.0Ah (C <sub>20</sub> , 1.80V/cell)   | <b>Cycle Use</b>                  | Initial Charging Current less than 18.0A.<br>Voltage 14.7V +1% at 25°C.<br>Temperature Coefficient -30mV/°C.   |
| <b>Approx. Weight</b>                         | 19.2kg  | <b>Standby Use</b>                | No limit on Initial Charging Current.<br>Voltage 13.65V +1% at 25°C Temp.<br>Coefficient -20mV/°C  |
| <b>Terminal</b>                               | M6  | <b>Capacity affected by Temp.</b> | 40°C      103%<br>25°C      100%<br>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>                  | 65.0Ah/3.25A, 20hr, 1.80V/cell<br>61.0Ah/6.10A, 10hr, 1.80V/cell<br>51.5Ah/10.3A, 5hr, 1.75V/cell<br>46.8Ah/15.6A, 3hr, 1.75V/cell<br>36.6Ah/36.6A, 1hr, 1.60V/cell | <b>Life Expectancy</b>            | 10-12 years according to EUROBAT   |
| <b>Max. Discharge Current</b>                 | 720A (5s)   |                                   |  |
| <b>Internal Resistance / Impedance (1kHz)</b> | Approx. 7.4mΩ   |                                   |  |
| <b>Operating Temp. Range</b>                  | Discharge: -15~50°C<br>Charge: 0~40°C<br>Storage: -15~40°C  |                                   |  |

## Dimensions

- **M6 Terminal** Unit: mm | Dimensions: 260 Length X 168 Width X 173 Height (179 Height incl. Terminal)



Specifications subject to change without notice.



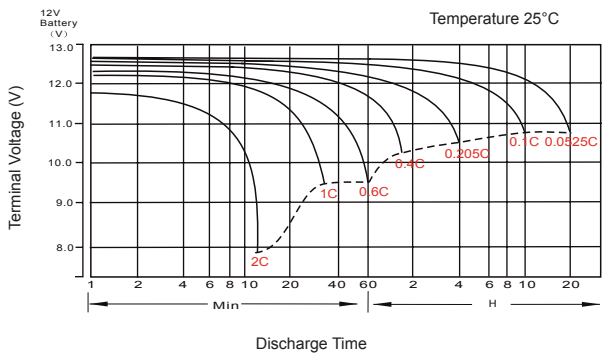
### Constant Current Discharge (Amperes) at 25°C

| F.V/Time   | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 80.7  | 68.7  | 57.4  | 45.6  | 34.5  | 28.3 | 18.0 | 14.2 | 11.6 | 9.38 | 8.17 | 6.63 | 5.66 | 3.19 |
| 1.80V/cell | 103.2 | 83.0  | 67.9  | 53.9  | 40.2  | 31.7 | 19.7 | 15.3 | 12.4 | 10.1 | 8.76 | 7.03 | 6.10 | 3.25 |
| 1.75V/cell | 113.4 | 90.6  | 73.0  | 55.9  | 41.7  | 33.2 | 20.4 | 15.6 | 12.7 | 10.3 | 9.00 | 7.15 | 6.16 | 3.28 |
| 1.70V/cell | 123.5 | 96.7  | 76.7  | 58.2  | 43.4  | 34.2 | 21.2 | 16.1 | 13.0 | 10.6 | 9.19 | 7.25 | 6.22 | 3.31 |
| 1.65V/cell | 133.3 | 102.9 | 81.5  | 61.4  | 44.4  | 35.3 | 21.8 | 16.7 | 13.5 | 10.9 | 9.39 | 7.37 | 6.25 | 3.35 |
| 1.60V/cell | 144.8 | 110.0 | 86.9  | 64.8  | 46.3  | 36.6 | 22.5 | 17.2 | 13.9 | 11.3 | 9.59 | 7.44 | 6.31 | 3.37 |

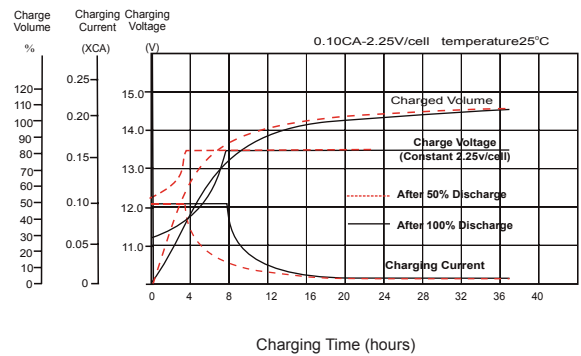
### Constant Power Discharge (Watts/cell) at 25°C

| F.V/Time   | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10   | 20h  |
|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 149.1 | 128.1 | 108.2 | 87.0  | 66.4  | 54.6 | 35.0 | 27.8 | 22.7 | 18.4 | 16.1 | 13.1 | 11.2 | 6.32 |
| 1.80V/cell | 188.3 | 152.7 | 126.1 | 101.1 | 76.6  | 60.8 | 37.9 | 29.7 | 24.2 | 19.7 | 17.2 | 13.8 | 11.9 | 6.43 |
| 1.75V/cell | 203.6 | 164.8 | 134.3 | 104.1 | 78.8  | 63.3 | 39.2 | 30.1 | 24.6 | 20.1 | 17.6 | 14.0 | 12.0 | 6.48 |
| 1.70V/cell | 216.9 | 173.5 | 140.1 | 107.7 | 81.6  | 65.1 | 40.7 | 30.9 | 25.2 | 20.6 | 17.9 | 14.2 | 12.1 | 6.54 |
| 1.65V/cell | 231.9 | 183.0 | 147.7 | 112.7 | 82.9  | 66.8 | 41.6 | 32.1 | 26.0 | 21.1 | 18.2 | 14.4 | 12.3 | 6.61 |
| 1.60V/cell | 246.0 | 192.5 | 155.7 | 118.2 | 85.9  | 68.8 | 42.7 | 32.9 | 26.7 | 21.7 | 18.6 | 14.5 | 12.4 | 6.64 |

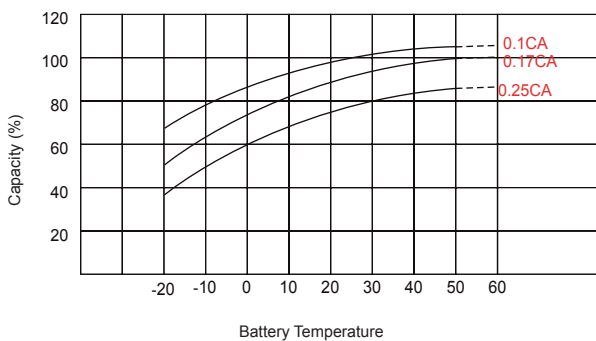
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

