# SBL120-12i(sh) (12V120Ah)

AGM-Technology | Maintenance Free | 10-12 Years Life Expect. EUROBAT | Cycle Stability | -15°C to +50°C

Standard Type | UPS | Emergency Lighting | Recyclable

## 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

Conform to
IEC60896-21&22

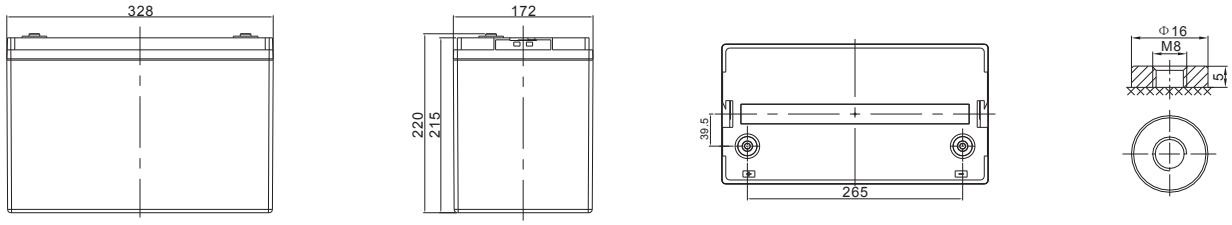
## Specifications

| | | |
|---|---|---|
| **Nominal Voltage** | 12V | |
| **Nominal Capacity** | 110Ah ($C_{10}$, 10.8V) | |
| **Approx. Weight** | 30.5kg | |
| **Terminal** | M8 | |
| **Container Material** | ABS UL94 HB | |
| **Rated Capacity (20°C)** | 115.4Ah/5.77A, 20hr, 10.8V | |
| | 110Ah/11A, 10hr, 10.8V | |
| | 107.2Ah/13.4A,8hr, 10.5V | |
| | 96Ah/19.2A, 5hr, 10.5V | |
| | 85.2Ah/28.4A, 3hr, 10.5V | |
| | 67.2Ah/67.2A, 1hr, 9.6V | |
| **Max. Discharge Current** | 1100A (5s) | |
| **Internal Resistance / Impedance (1kHz)** | Approx. 5.0mΩ | |
| **Nominal Oper. Temp. R.** | 20±2°C | |
| **Operating Temp. Range** | Discharge: | -15~50°C |
| | Charge: | -20~40°C |
| | Storage: | -15~40°C |
| **Float Charge** | 2.285V/cell ± 0,5 % @ 20°C | |
| | Charging Current: 0.1-0.2C | |
| | Temperature coefficient: -3mV/cell/°C | |
| **Capacity affected by Temp.** | 40°C | 103% |
| | 25°C | 100% |
| | 0°C | 86% |
| **Self Discharge** | 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. | |
| **Life Expectancy** | 10-12 years according to EUROBAT | |

## Dimensions

### M8 Terminal

Unit: mm | Dimensions: 328±2 Length X 172±2 Width X 215±2 Height (220±2 Height incl. Terminal)



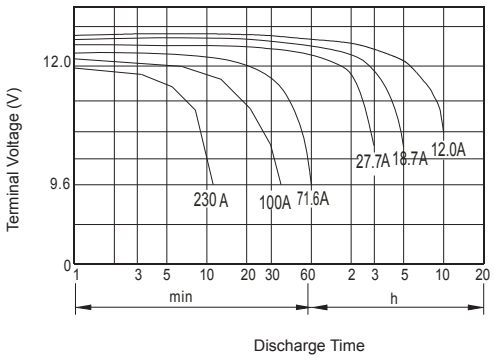
## Constant Current Discharge (Amperes) at 20°C

| F.V/Time | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.60V | 255.1 | 200.5 | 120.5 | 67.2 | 40.0 | 31.0 | 24.4 | 20.8 | 13.9 | 11.6 | 6.07 |
| 1.65V | 241.0 | 191.7 | 115.6 | 64.9 | 38.8 | 30.1 | 23.7 | 20.2 | 13.8 | 11.5 | 5.97 |
| 1.70V | 221.9 | 179.5 | 110.5 | 62.8 | 37.5 | 29.3 | 23.1 | 19.7 | 13.6 | 11.3 | 5.90 |
| 1.75V | 203.1 | 167.1 | 105.6 | 60.5 | 36.2 | 28.4 | 22.5 | 19.2 | 13.4 | 11.1 | 5.83 |
| 1.80V | 183.8 | 154.3 | 101.0 | 58.2 | 34.9 | 27.5 | 21.8 | 18.7 | 13.2 | 11.0 | 5.77 |
| 1.85V | 150.3 | 128.0 | 87.0 | 52.2 | 32.0 | 25.4 | 20.3 | 17.4 | 12.4 | 10.4 | 5.48 |

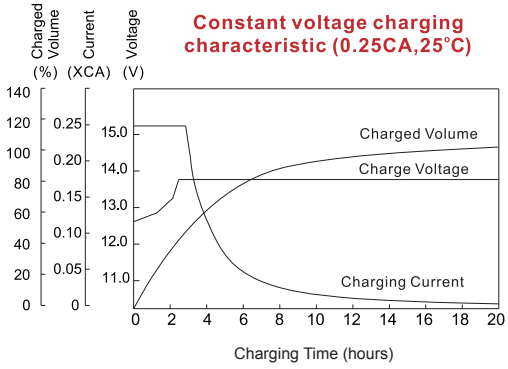
## Constant Power Discharge (Watts/cell) at 20°C

| F.V/Time | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.60V | 433.5 | 350.5 | 218.8 | 126.3 | 75.9 | 59.3 | 46.8 | 40.0 | 27.2 | 22.8 | 12.0 |
| 1.65V | 417.6 | 340.0 | 212.3 | 122.7 | 73.8 | 57.7 | 45.7 | 39.1 | 27.0 | 22.6 | 11.8 |
| 1.70V | 391.5 | 323.2 | 204.9 | 119.4 | 71.8 | 56.4 | 44.6 | 38.2 | 26.6 | 22.3 | 11.7 |
| 1.75V | 364.8 | 305.2 | 197.9 | 115.8 | 69.6 | 54.9 | 43.7 | 37.4 | 26.3 | 22.0 | 11.5 |
| 1.80V | 336.0 | 285.8 | 191.0 | 112.0 | 67.4 | 53.4 | 42.6 | 36.6 | 25.9 | 21.7 | 11.4 |
| 1.85V | 279.5 | 240.5 | 166.2 | 101.0 | 62.1 | 49.6 | 39.7 | 34.2 | 24.4 | 20.5 | 10.9 |

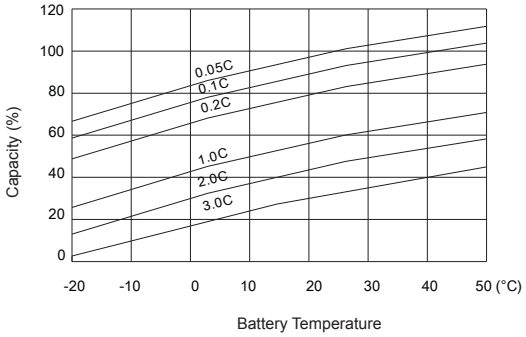
## Discharge Characteristics




## Float Charging Characteristics




## Temperature Effects in Relation to Battery Capacity




## Effect of Temperature on Long Term Float Life

