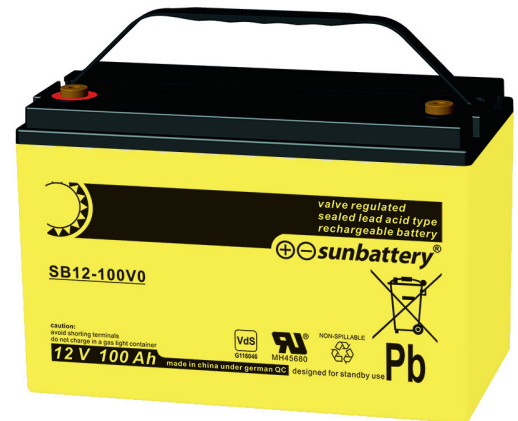


SB12-100V0 (12V100Ah)

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



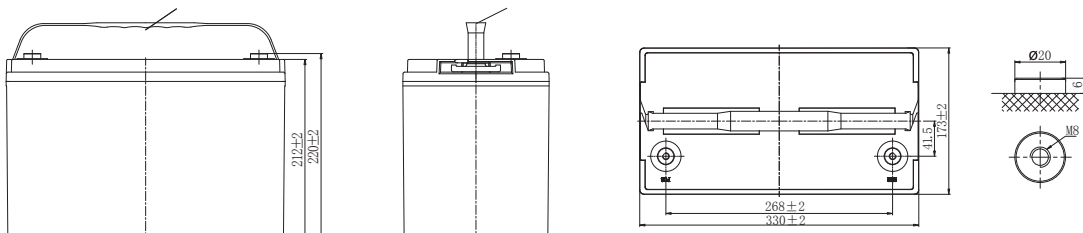
Specifications

| | | | |
|---|---|-----------------------------------|--|
| Nominal Voltage | 12V | Nominal Oper. Temp. R. | 25±3°C |
| Nominal Capacity | 100Ah (C ₂₀ , 1.80V/cell) | Cycle Use | Initial Charging Current less than 30.0A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C. |
| Approx. Weight | 32.0kg | Standby Use | No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C |
| Terminal | M8 | Capacity affected by Temp. | 40°C 103% 25°C 100% 0°C 86% |
| Container Material | ABS UL94 V0 | Self Discharge | 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. |
| Rated Capacity (25°C) | 100.0Ah/5.00A, 20hr, 1.80V/cell 100.0Ah/10.0A, 10hr, 1.80V/cell 94.5Ah/18.9A, 5hr, 1.75V/cell 86.1Ah/28.7A, 3hr, 1.75V/cell 75.7Ah/75.7A, 1hr, 1.60V/cell | Life Expectancy | 10-12 years according to EUROBAT |
| Max. Discharge Current | 1000A (5s) | | |
| Internal Resistance / Impedance (1kHz) | Approx. 4.9mΩ | | |
| Operating Temp. Range | Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C | | |

Dimensions

■ M8 Terminal

Unit: mm | Dimensions: 330 Length X 173 Width X 212 Height (220 Height incl. Terminal)



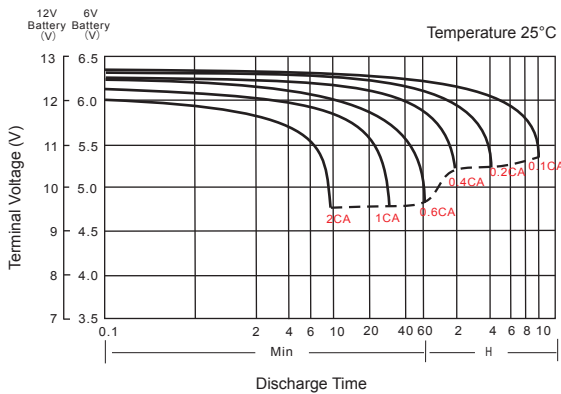
Constant Current Discharge (Amperes) at 25°C

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 138.1 | 124.6 | 109.3 | 92.9 | 69.4 | 58.5 | 37.2 | 26.2 | 21.2 | 17.2 | 15.1 | 11.3 | 9.7 | 4.80 |
| 1.80V/cell | 176.5 | 150.5 | 129.2 | 103.6 | 77.8 | 63.7 | 40.0 | 28.2 | 22.7 | 18.4 | 16.2 | 11.9 | 10.0 | 5.00 |
| 1.75V/cell | 193.9 | 164.5 | 139.0 | 111.4 | 83.8 | 68.5 | 42.0 | 28.7 | 23.2 | 18.9 | 16.6 | 12.3 | 10.3 | 5.40 |
| 1.70V/cell | 211.4 | 175.5 | 146.0 | 116.0 | 87.1 | 70.8 | 43.8 | 29.5 | 23.8 | 19.4 | 16.9 | 12.8 | 10.7 | 5.63 |
| 1.65V/cell | 228.1 | 186.6 | 155.1 | 122.3 | 89.3 | 73.1 | 44.9 | 30.8 | 24.6 | 19.9 | 17.3 | 13.2 | 11.0 | 5.80 |
| 1.60V/cell | 247.7 | 199.6 | 165.2 | 129.1 | 93.1 | 75.7 | 46.5 | 31.7 | 25.4 | 20.6 | 17.7 | 13.4 | 11.2 | 5.89 |

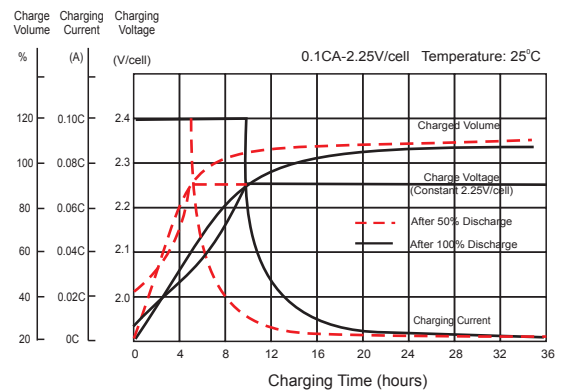
Constant Power Discharge (Watts/cell) at 25°C

| F.V/Time | 10min | 15min | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10 | 20h |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 257.9 | 235.0 | 208.1 | 178.8 | 134.8 | 114.1 | 72.9 | 51.6 | 41.9 | 34.0 | 29.9 | 22.5 | 19.4 | 10.3 |
| 1.80V/cell | 325.7 | 280.1 | 242.4 | 196.5 | 149.9 | 123.5 | 77.9 | 55.2 | 44.5 | 36.3 | 32.0 | 23.7 | 20.0 | 10.7 |
| 1.75V/cell | 352.2 | 302.3 | 258.3 | 209.6 | 160.0 | 132.3 | 81.6 | 56.0 | 45.5 | 37.2 | 32.7 | 24.4 | 20.5 | 11.0 |
| 1.70V/cell | 375.3 | 318.2 | 269.5 | 217.0 | 165.8 | 136.1 | 84.7 | 57.5 | 46.5 | 38.0 | 33.4 | 25.4 | 21.3 | 11.2 |
| 1.65V/cell | 401.4 | 335.9 | 284.2 | 227.0 | 168.4 | 139.7 | 86.7 | 59.7 | 47.9 | 39.0 | 34.0 | 26.1 | 21.9 | 11.6 |
| 1.60V/cell | 425.9 | 353.3 | 299.4 | 238.0 | 174.6 | 143.9 | 89.1 | 61.2 | 49.3 | 40.1 | 34.6 | 26.4 | 22.2 | 11.7 |

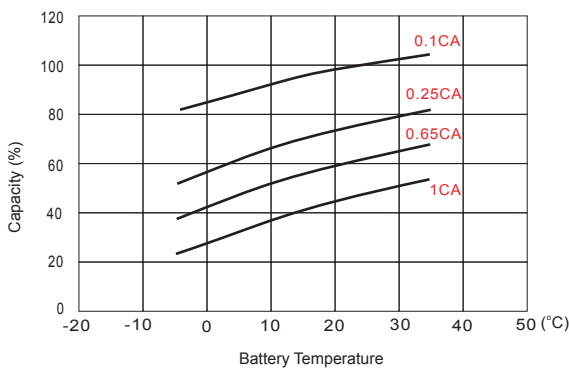
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

