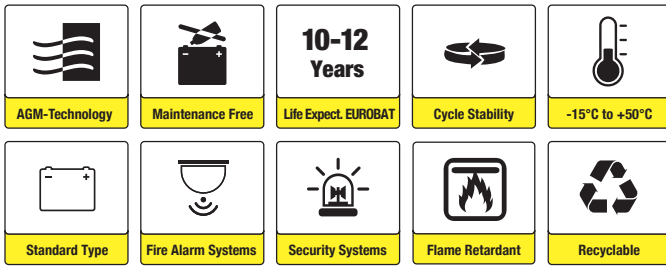




sunbattery®

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



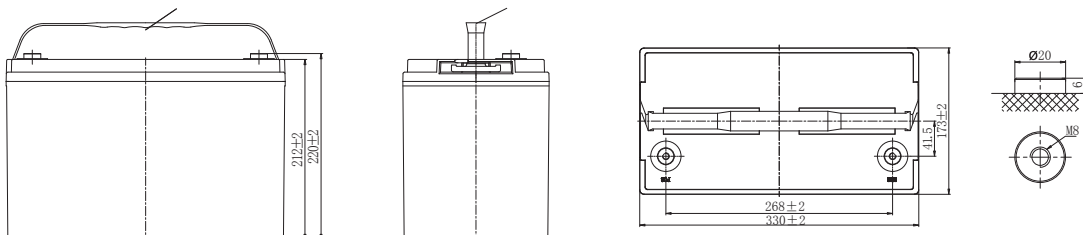
Specifications

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)





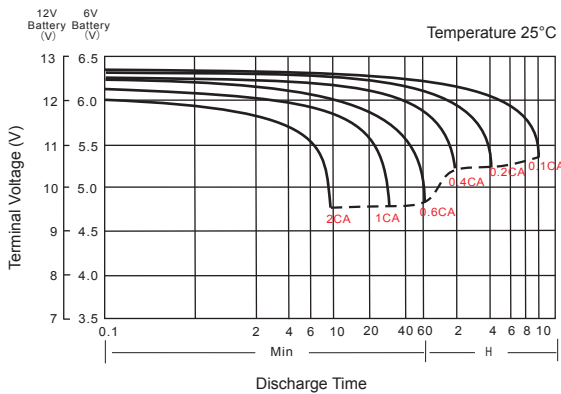
Constant Current Discharge (Amperes) at 25°C

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

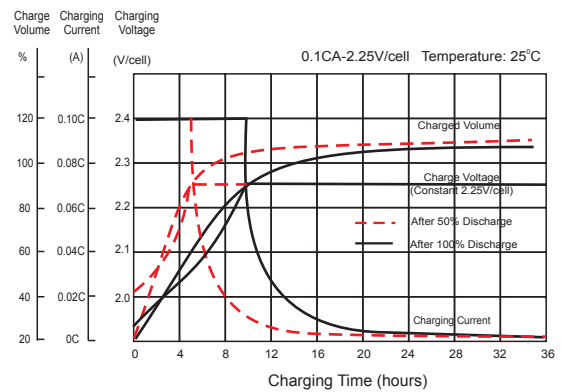
Constant Power Discharge (Watts/cell) at 25°C

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

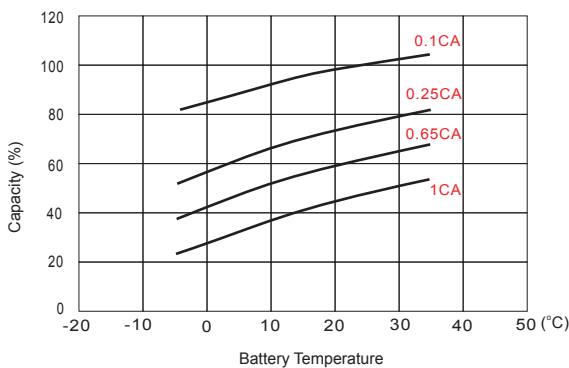
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

