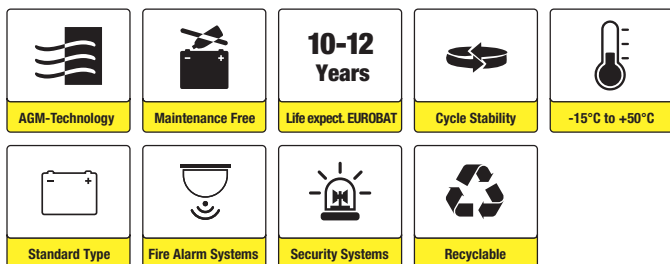




⊕⊖ **sunbattery®**

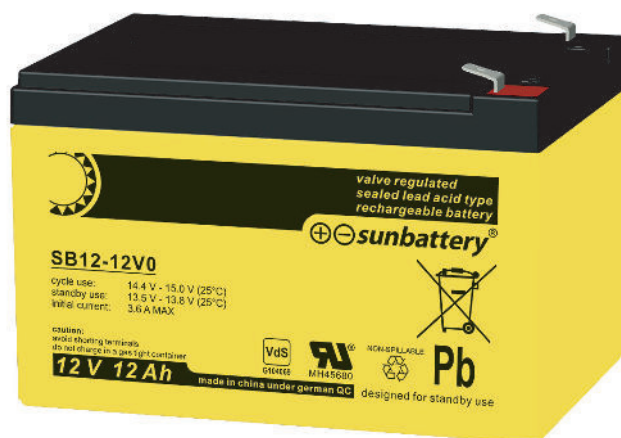
SB12-12V0 (12V12Ah)



Applications

- UPS and EPS
- Emergency light
- Railway signal and aircraft
- Signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply

Certificates

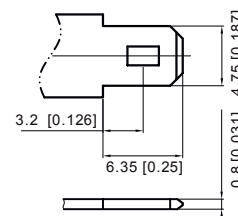
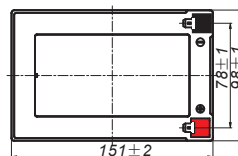
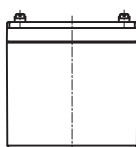
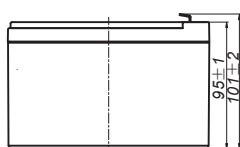


Specifications

Nominal Voltage	12V	Nominal Oper. Temp. R.	25±3°C
Nominal Capacity	12.0Ah (C ₂₀ ¹ 1.80V/cell)	Cycle Use	Initial Charging Current less than 3.6A. Voltage 14.4V~15.0V at 25°C. Temperature Coefficient -30mV/°C.
Approx. Weight	3.85kg	Standby Use	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C Temp. Coefficient -20mV/°C
Terminal	T1	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)	12.00Ah/0.600A, 20hr, 1.80V/cell 11.40Ah/1.14A, 10hr, 1.80V/cell 10.65Ah/2.13A, 5hr, 1.75V/cell 9.39Ah/3.13A, 3hr, 1.75V/cell 7.89Ah/7.89A, 1hr, 1.60V/cell	Life Expectancy	10-12 years according to EUROBAT
Max. Discharge Current	180A (5s)		
Internal Resistance / Impedance (1kHz)	Approx. 18mΩ		
Operating Temp. Range	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C		

Dimensions

- **T1 Terminal**
Unit: mm [inches]





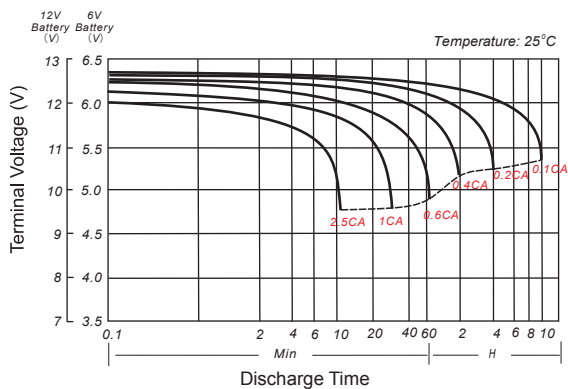
Constant Current Discharge (Amperes) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	23.9	18.9	15.9	12.0	8.84	7.23	4.19	3.04	2.46	2.08	1.78	1.40	1.13	0.588
1.80V/cell	25.1	19.7	16.4	12.4	9.02	7.36	4.26	3.08	2.49	2.11	1.80	1.41	1.14	0.600
1.75V/cell	26.3	20.4	16.9	12.6	9.20	7.49	4.32	3.13	2.53	2.13	1.82	1.43	1.16	0.602
1.70V/cell	27.6	21.1	17.4	12.9	9.37	7.62	4.39	3.17	2.56	2.16	1.85	1.45	1.17	0.607
1.65V/cell	28.3	21.6	17.7	13.1	9.48	7.70	4.43	3.20	2.58	2.18	1.86	1.46	1.18	0.610
1.60V/cell	30.0	22.6	18.4	13.5	9.73	7.89	4.52	3.27	2.63	2.22	1.89	1.48	1.20	0.619

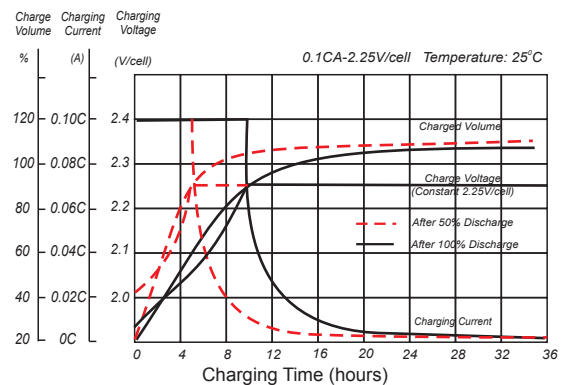
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	45.7	36.4	30.7	23.3	17.2	14.1	8.21	5.97	4.84	4.10	3.52	2.77	2.24	1.18
1.80V/cell	47.7	37.6	31.5	23.8	17.4	14.3	8.31	6.05	4.90	4.15	3.56	2.80	2.27	1.19
1.75V/cell	49.8	38.8	32.2	24.2	17.7	14.5	8.42	6.12	4.96	4.20	3.60	2.83	2.29	1.20
1.70V/cell	51.8	40.0	33.1	24.7	18.0	14.7	8.53	6.20	5.02	4.25	3.64	2.86	2.32	1.21
1.65V/cell	53.0	40.7	33.5	25.0	18.1	14.8	8.60	6.25	5.05	4.28	3.66	2.88	2.33	1.22
1.60V/cell	55.8	42.2	34.6	25.6	18.5	15.1	8.74	6.35	5.13	4.34	3.72	2.93	2.37	1.24

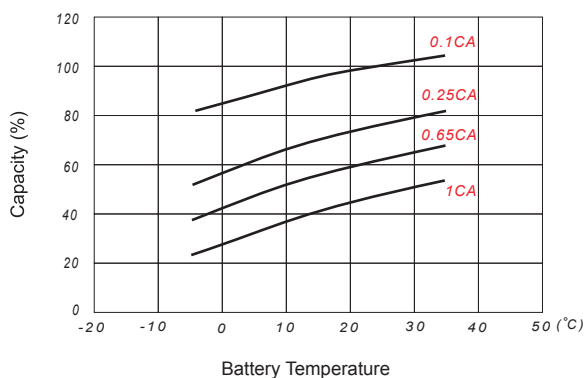
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

