



⊕⊖ **sunbattery**®

SB6-12/SB6-12V0 (6V12Ah)



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

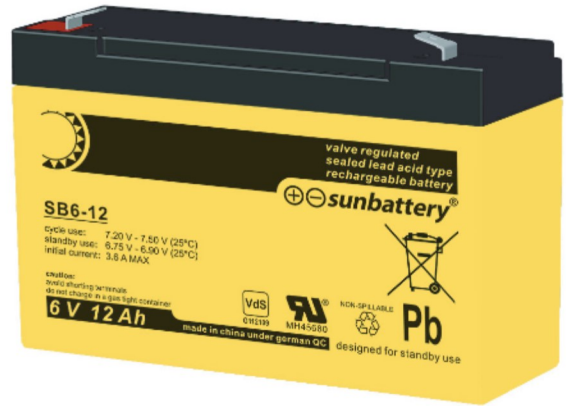
Certificates



Specifications

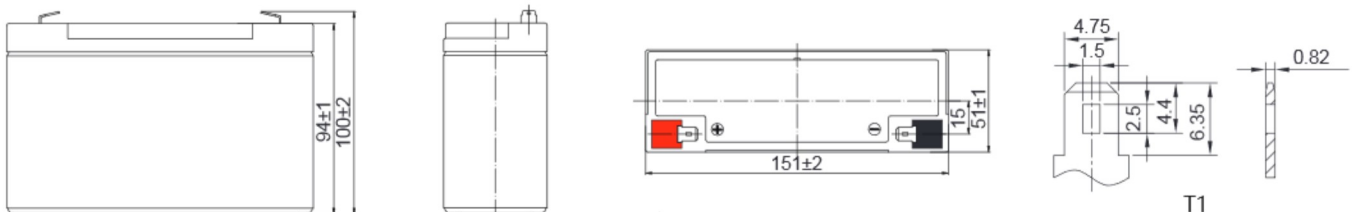
Nominal Voltage	6V
Nominal Capacity	12Ah (C ₂₀ , 1.80V/cell)
Approx. Weight	1.95kg
Terminal	T1
Container Material	ABS UL94 HB/UL94 V0
Rated Capacity (25°C)	12.0Ah/0.060A, 20hr, 1.80V/cell 11.2Ah/1.12A, 10hr, 1.80V/cell 10.2Ah/2.03A, 5hr, 1.75V/cell 8.94Ah/2.98A, 3hr, 1.75V/cell 7.49Ah/7.49A, 1hr, 1.60V/cell
Max. Discharge Current	180A (5s)
Internal Resistance / Impedance (1kHz)	Approx. 15mΩ
Operating Temp. Range	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C

Nominal Oper. Temp. R.	25±3°C
Cycle Use	Initial Charging Current less than 3.6A. Voltage 7.2V~7.5V at 25°C. Temperature Coefficient -10mV/°C.
Standby Use	No limit on Initial Charging Current. Voltage 6.75V~6.9V at 25°C Temp. Coefficient -10mV/°C
Capacity affected by Temp.	40°C 103% 25°C 100% 0°C 86%
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.
Life Expectancy	3-5 years according to EUROBAT



Dimensions

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



T1



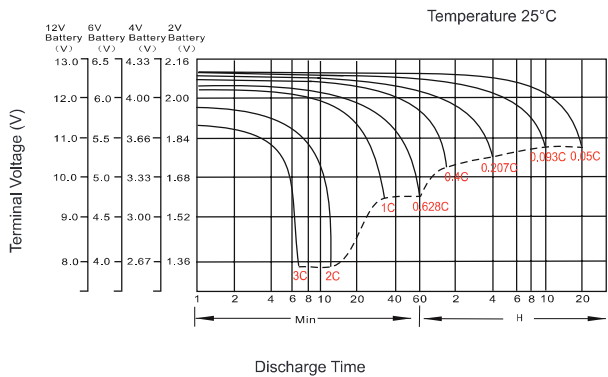
Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	22.9	15.2	12.5	11.0	9.02	7.04	5.83	3.58	2.70	2.22	1.88	1.63	1.30	1.08	0.594
1.80V/cell	27.4	18.2	14.7	12.6	10.1	7.73	6.31	3.84	2.88	2.36	1.98	1.70	1.34	1.12	0.600
1.75V/cell	32.8	20.9	16.4	13.9	10.8	8.27	6.67	4.00	2.98	2.42	2.03	1.75	1.38	1.14	0.606
1.70V/cell	38.1	23.3	18.0	15.1	11.5	8.67	6.96	4.14	3.05	2.47	2.08	1.79	1.40	1.16	0.617
1.65V/cell	42.0	25.3	19.3	16.2	12.1	9.06	7.20	4.27	3.14	2.54	2.12	1.82	1.42	1.18	0.625
1.60V/cell	46.3	27.4	20.8	17.1	12.8	9.42	7.49	4.38	3.21	2.60	2.17	1.86	1.45	1.20	0.629

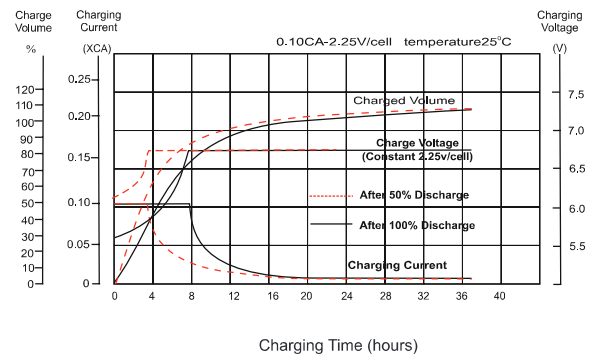
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	42.6	28.4	23.6	20.8	17.1	13.5	11.3	6.96	5.26	4.33	3.69	3.20	2.56	2.14	1.18
1.80V/cell	49.5	33.4	27.2	23.6	19.0	14.7	12.1	7.41	5.58	4.59	3.86	3.33	2.65	2.21	1.19
1.75V/cell	58.8	37.9	30.0	25.8	20.2	15.7	12.7	7.69	5.75	4.68	3.95	3.42	2.71	2.26	1.20
1.70V/cell	67.3	41.7	32.7	27.8	21.4	16.3	13.2	7.94	5.88	4.78	4.04	3.48	2.75	2.29	1.22
1.65V/cell	73.1	44.6	34.7	29.5	22.4	16.9	13.6	8.17	6.02	4.88	4.11	3.54	2.79	2.32	1.23
1.60V/cell	79.2	47.5	36.6	30.6	23.3	17.5	14.1	8.33	6.13	4.99	4.18	3.61	2.84	2.35	1.24

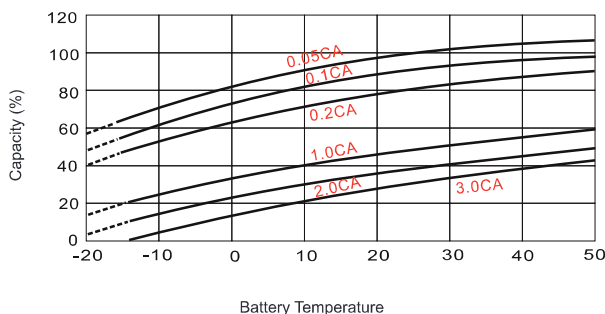
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

