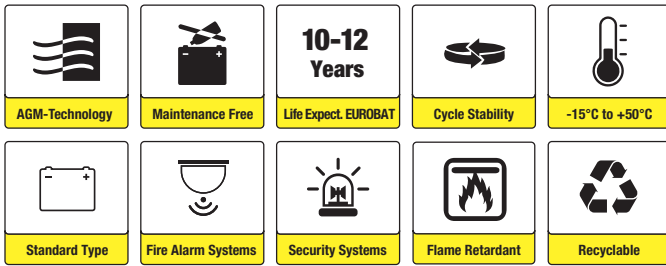




⊕⊖ sunbattery®

SB12-18V0 (12V18Ah)



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



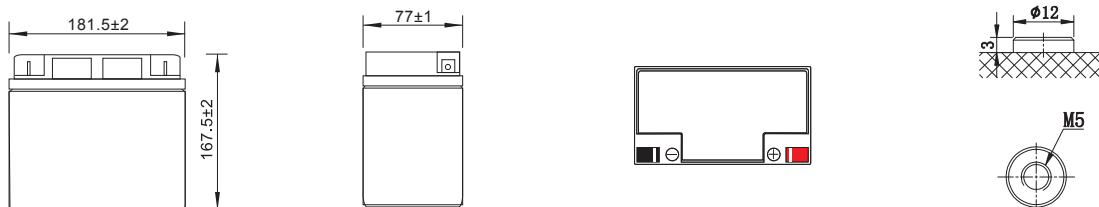
Specifications

Nominal Voltage	12V	Nominal Oper. Temp. R.	25±3°C
Nominal Capacity	18Ah (C ₂₀ , 1.80V/cell)	Cycle Use	Initial Charging Current less than 5.4A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
Approx. Weight	5.7kg	Standby Use	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
Terminal	M5	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)	18.0Ah/0.90A, 20hr, 1.80V/cell 16.7Ah/1.67A, 10hr, 1.80V/cell 15.1Ah/3.03A, 5hr, 1.75V/cell 13.5Ah/4.49A, 3hr, 1.75V/cell 11.1Ah/11.1A, 1hr, 1.60V/cell	Life Expectancy	10-12 years according to EUROBAT
Max. Discharge Current	112,5A (5s)		
Internal Resistance / Impedance (1kHz)	Approx. 16mΩ		
Operating Temp. Range	Discharge: -15~50°C Charge: 0~40°C Storage: -15~40°C		

Dimensions

■ M5 Terminal

Unit: mm | Dimensions: 181.5 Length X 77 Width X 167.5 Height (167.5 Height incl. Terminal)





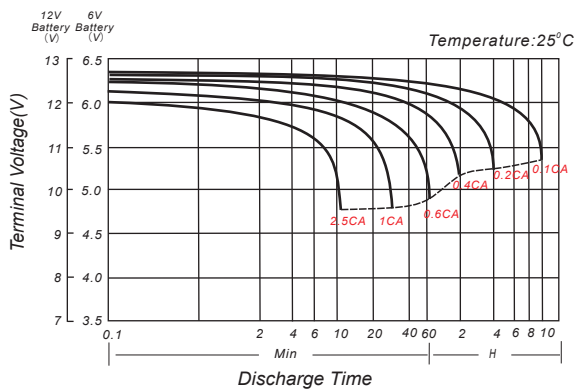
Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.9	25.6	22.7	19.9	15.3	11.4	9.11	5.51	4.13	3.35	2.84	2.47	1.96	1.63	0.884
1.80V/cell	40.8	30.2	25.9	22.1	16.7	12.2	9.79	5.85	4.34	3.51	2.94	2.55	2.02	1.67	0.900
1.75V/cell	45.8	33.0	27.8	23.4	17.4	12.8	10.2	6.07	4.49	3.60	3.03	2.62	2.06	1.70	0.918
1.70V/cell	49.9	35.4	29.7	24.7	18.1	13.2	10.6	6.27	4.63	3.69	3.09	2.67	2.09	1.72	0.929
1.65V/cell	53.8	37.7	31.1	25.8	18.9	13.8	10.9	6.44	4.73	3.77	3.14	2.71	2.12	1.74	0.938
1.60V/cell	57.9	39.6	31.9	26.4	19.3	14.0	11.1	6.59	4.82	3.84	3.20	2.74	2.15	1.76	0.945

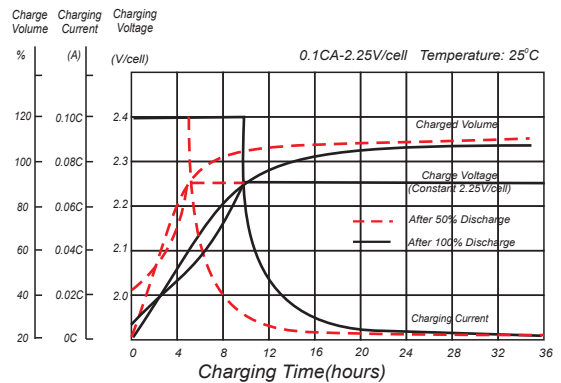
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	64.0	48.8	43.6	38.5	29.8	22.3	17.9	10.9	8.21	6.68	5.68	4.95	3.95	3.29	1.79
1.80V/cell	76.3	57.2	49.5	42.7	32.4	23.9	19.2	11.5	8.59	6.98	5.86	5.09	4.04	3.36	1.81
1.75V/cell	84.8	62.0	52.8	44.8	33.6	24.9	20.0	11.9	8.87	7.14	6.02	5.21	4.11	3.39	1.82
1.70V/cell	91.1	65.6	55.7	46.8	34.7	25.6	20.6	12.2	9.06	7.25	6.08	5.27	4.15	3.42	1.83
1.65V/cell	96.6	68.8	57.5	48.4	35.8	26.3	21.0	12.5	9.19	7.35	6.15	5.32	4.18	3.43	1.84
1.60V/cell	101.5	70.8	58.0	48.7	36.0	26.5	21.3	12.7	9.31	7.45	6.22	5.33	4.21	3.45	1.85

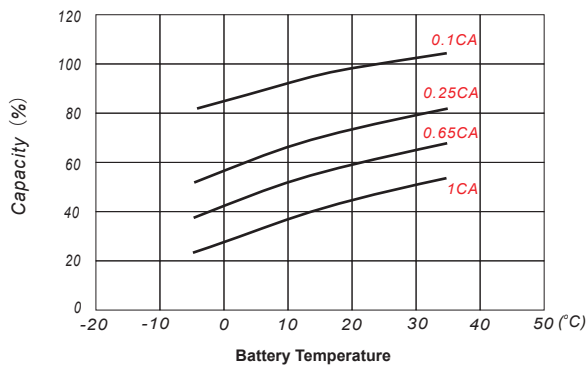
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

