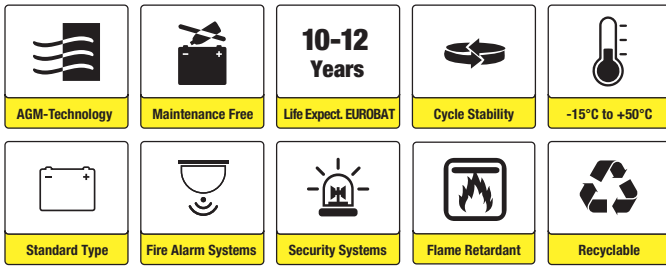




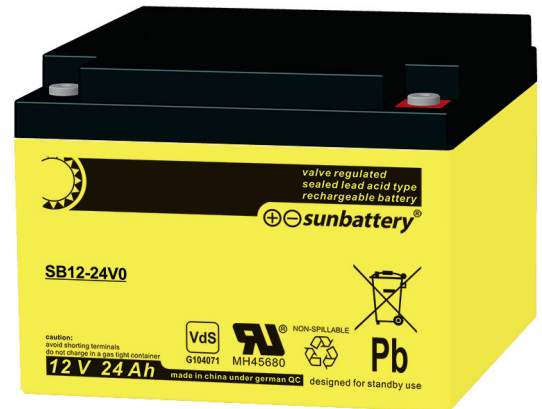
# SB12-24V0 (12V24Ah)



## 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



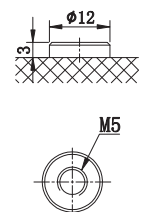
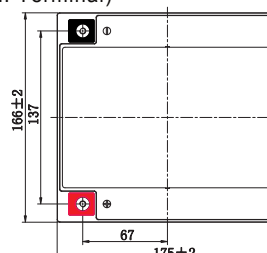
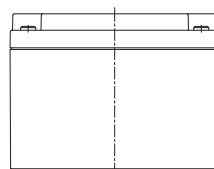
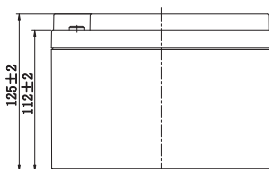
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	24Ah (C <sub>20</sub> , 1.80V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 7.2A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	7.8kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	M5	<b>Capacity affected by Temp.</b>	40°C      103% 25°C      100% 0°C        86%
<b>Container Material</b>	ABS UL94 V0	<b>Self Discharge</b>	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.
<b>Rated Capacity (25°C)</b>	24.0Ah/1.20A, 20hr, 1.80V/cell 22.3Ah/2.23A, 10hr, 1.80V/cell 20.4Ah/4.08A, 5hr, 1.75V/cell 18.4Ah/6.12A, 3hr, 1.75V/cell 15.1Ah/15.1A, 1hr, 1.60V/cell	<b>Life Expectancy</b>	10-12 years according to EUROBAT
<b>Max. Discharge Current</b>	360A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 14mΩ		
<b>Operating Temp. Range</b>	Discharge:      -15~50°C Charge:            0~40°C Storage:          -15~40°C		

## Dimensions

### ■ M5 Terminal

Unit: mm | Dimensions: 166 Length X 175 Width X 125 Height (125 Height incl. Terminal)





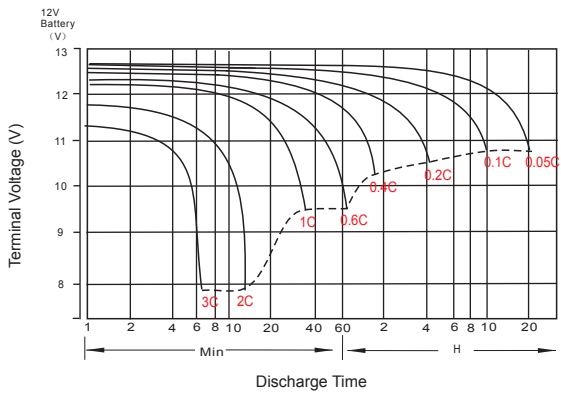
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	45.7	35.1	29.1	25.1	19.4	14.32	12.07	7.14	5.58	4.54	3.70	3.21	2.59	2.16	1.19
1.80V/cell	61.3	44.8	35.1	29.7	22.9	16.7	13.52	7.79	6.01	4.85	3.97	3.45	2.75	2.23	1.20
1.75V/cell	69.2	49.3	38.4	32.0	23.8	17.3	14.14	8.08	6.12	4.96	4.08	3.54	2.80	2.29	1.21
1.70V/cell	76.2	53.7	41.0	33.6	24.8	18.0	14.59	8.28	6.29	5.09	4.18	3.61	2.84	2.34	1.23
1.65V/cell	84.0	58.0	43.6	35.7	26.1	18.4	14.93	8.40	6.56	5.26	4.30	3.69	2.88	2.39	1.25
1.60V/cell	92.6	62.9	46.6	38.0	27.6	19.2	15.07	8.76	6.76	5.43	4.44	3.77	2.91	2.41	1.26

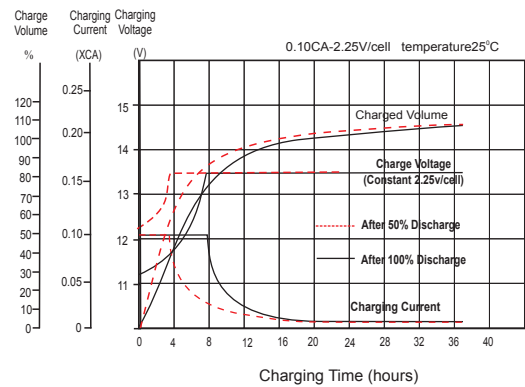
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	83.6	64.8	54.3	47.4	37.0	27.5	23.3	13.9	10.9	8.88	7.26	6.32	5.12	4.28	2.35
1.80V/cell	111.0	81.9	64.7	55.2	43.0	31.8	25.9	15.0	11.6	9.43	7.76	6.75	5.41	4.41	2.37
1.75V/cell	122.5	88.5	69.8	58.8	44.3	32.6	27.0	15.5	11.8	9.60	7.93	6.91	5.49	4.52	2.39
1.70V/cell	131.1	94.3	73.4	61.3	45.9	33.8	27.8	15.9	12.1	9.84	8.12	7.04	5.56	4.61	2.44
1.65V/cell	142.5	100.8	77.5	64.7	48.0	34.4	28.2	16.0	12.6	10.1	8.32	7.18	5.64	4.70	2.47
1.60V/cell	153.6	107.0	81.5	68.1	50.3	35.6	28.3	16.6	12.9	10.4	8.56	7.31	5.68	4.74	2.48

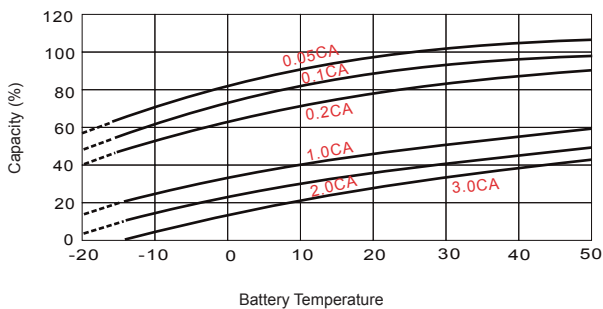
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

