sunbattery®

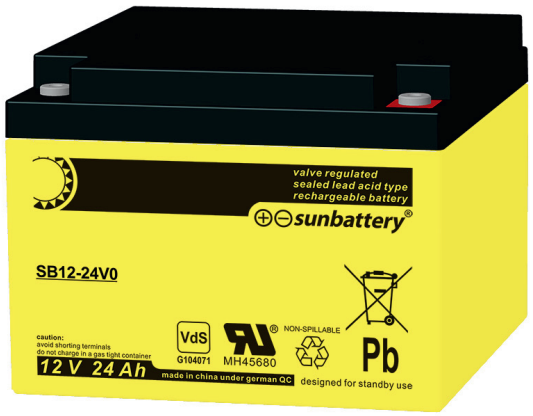
SB12-24V0 (12V24Ah)

AGM-Technology | Maintenance Free | 10-12 Years Life Expect. EUROBAT | Cycle Stability | -15°C to +50°C

Standard Type | Fire Alarm Systems | Security Systems | Flame Retardant | Recyclable

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

VdS G104071 · ISO 9001 Conform to IEC60896-21&22

Specifications

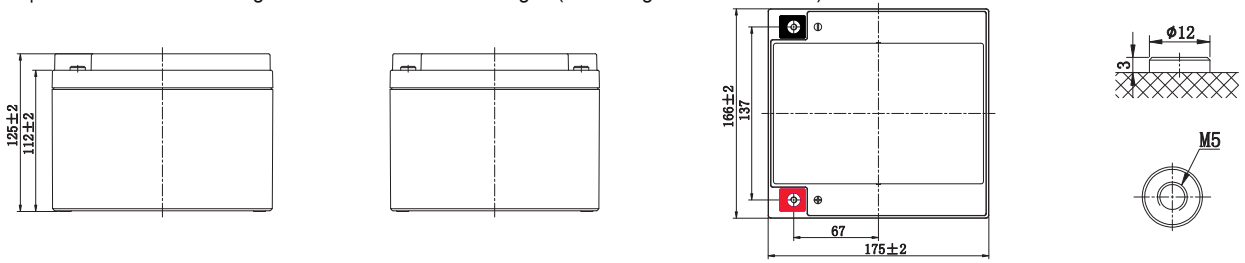
Nominal Voltage	12V	
Nominal Capacity	24Ah (C_{20}, 1.80V/cell)	
Approx. Weight	7.8kg	
Terminal	M5	
Container Material	ABS UL94 V0	
Rated Capacity (25°C)	24.0Ah/1.20A, 20hr, 1.80V/cell	
	22.3Ah/2.23A, 10hr, 1.80V/cell	
	20.4Ah/4.08A, 5hr, 1.75V/cell	
	18.4Ah/6.12A, 3hr, 1.75V/cell	
	15.1Ah/15.1A, 1hr, 1.60V/cell	
Max. Discharge Current	360A (5s)	
Internal Resistance / Impedance (1kHz)	Approx. 14mΩ	
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 7.2A.	
	Voltage 14.7V +-1% at 25°C.	
	Temperature Coefficient -30mV/°C.	
Standby Use	No limit on Initial Charging Current.	
	Voltage 13.65V +-1% at 25°C Temp.	
	Coefficient -20mV/°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	10-12 years according to EUROBAT	

Dimensions

M5 Terminal

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



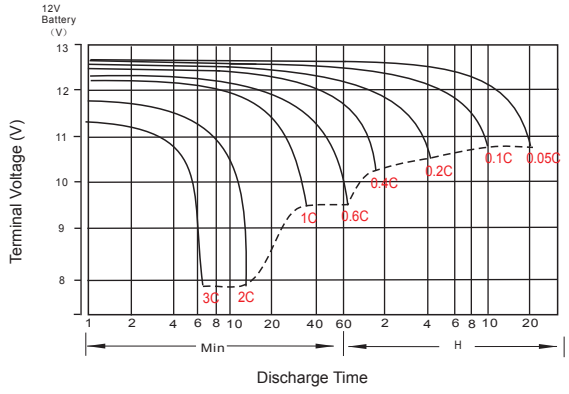
Constant Current Discharge (Amperes) at 25°C

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

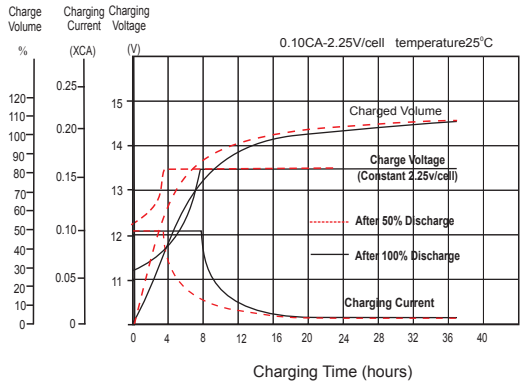
Constant Power Discharge (Watts/cell) at 25°C

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

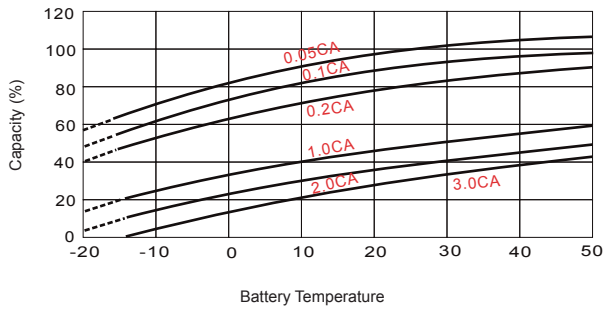
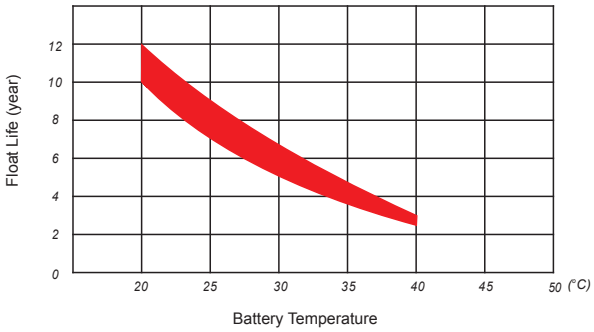
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life