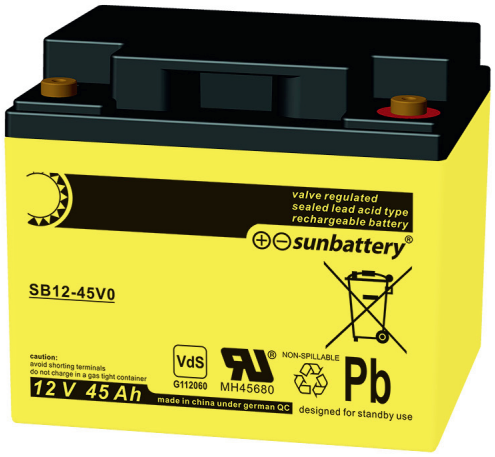
sunbattery®

SB12-45V0 (12V45Ah)

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 G112060 | MH45680 | ISO 9001 Conform to IEC60896-21&22

Specifications

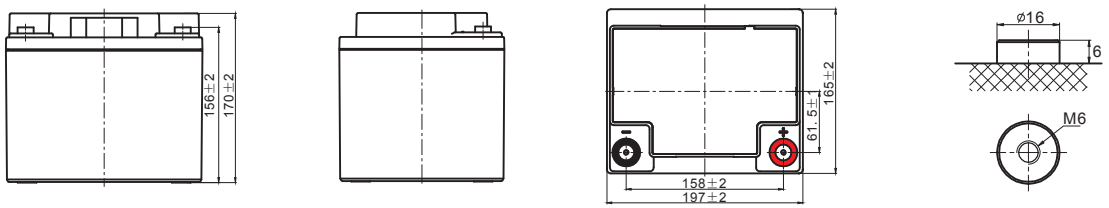
Nominal Voltage	12V	
Nominal Capacity	45.0Ah (C_{20}, 1.80V/cell)	
Approx. Weight	14.5kg	
Terminal	M6	
Container Material	ABS UL94 V0	
Rated Capacity (25°C)	45.0Ah/2.25A, 20hr, 1.80V/cell	
	42.0Ah/4.20A, 10hr, 1.80V/cell	
	36.6Ah/7.31A, 5hr, 1.75V/cell	
	32.7Ah/10.9A, 3hr, 1.75V/cell	
	26.0Ah/26.0A, 1hr, 1.60V/cell	
Max. Discharge Current	540A (5s)	
Internal Resistance / Impedance (1kHz)	Approx. 9.0mΩ	
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 13.5A.	
	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

M6 Terminal

Unit: mm | Dimensions: 197 Length X 165 Width X 170 Height (170 Height incl. Terminal)



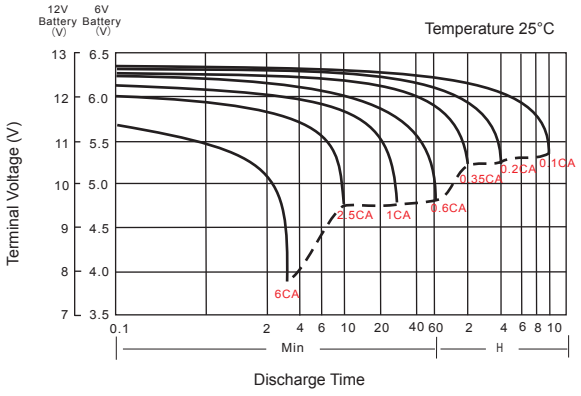
Constant Current Discharge (Amperes) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	49.1	41.3	36.7	30.4	23.5	20.1	13.0	9.77	8.01	6.74	5.90	4.73	4.07	2.17
1.80V/cell	56.2	46.4	40.5	33.0	25.3	21.2	14.0	10.5	8.51	7.14	6.25	4.98	4.20	2.25
1.75V/cell	63.9	52.3	44.8	35.9	27.6	23.1	14.5	10.9	8.80	7.31	6.45	5.15	4.31	2.30
1.70V/cell	72.1	58.0	49.5	39.2	29.7	24.4	15.3	11.5	9.20	7.73	6.76	5.37	4.48	2.36
1.65V/cell	77.5	62.1	52.6	41.4	31.5	25.3	15.9	12.0	9.56	7.97	6.99	5.55	4.60	2.44
1.60V/cell	85.2	68.1	57.1	44.1	32.7	26.0	16.3	12.3	9.77	8.17	7.14	5.64	4.70	2.48

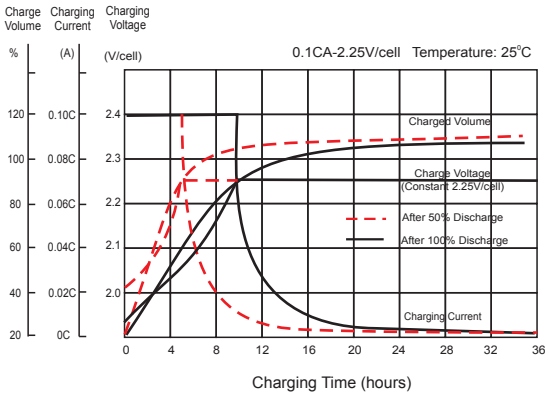
Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10	20h
1.85V/cell	91.8	77.9	69.8	58.6	45.6	39.1	25.5	19.2	15.8	13.3	11.7	9.44	8.14	4.34
1.80V/cell	103.8	86.4	76.1	62.6	48.8	41.1	27.2	20.6	16.7	14.1	12.4	9.91	8.38	4.49
1.75V/cell	116.0	96.2	83.3	67.5	52.7	44.6	28.2	21.3	17.2	14.4	12.7	10.2	8.60	4.60
1.70V/cell	128.1	105.2	91.3	73.3	56.6	47.0	29.7	22.4	18.0	15.2	13.3	10.6	8.92	4.71
1.65V/cell	136.3	111.8	96.4	76.7	59.3	48.3	30.6	23.2	18.6	15.6	13.7	11.0	9.16	4.85
1.60V/cell	146.5	120.4	103.6	81.3	61.3	49.5	31.2	23.7	19.0	15.9	14.0	11.1	9.33	4.92

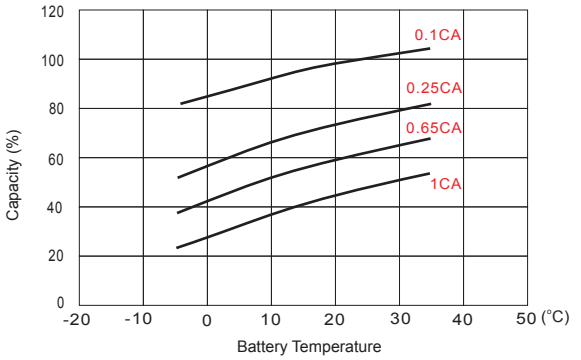
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life