



# SB12-180A FT V0 (12V180Ah)



## 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



Conform to IEC60896-21&22



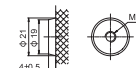
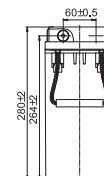
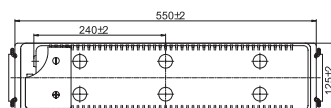
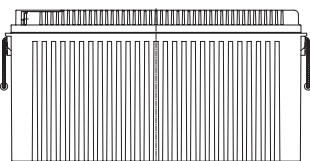
## Specifications

<b>Nominal Voltage</b>	12V	<b>Nominal Oper. Temp. R.</b>	25±3°C
<b>Nominal Capacity</b>	180Ah (C <sub>10</sub> , 1.80V/cell)	<b>Cycle Use</b>	Initial Charging Current less than 54.0A. Voltage 14.7V +1% at 25°C. Temperature Coefficient -30mV/°C.
<b>Approx. Weight</b>	51.2kg	<b>Standby Use</b>	No limit on Initial Charging Current. Voltage 13.65V +1% at 25°C Temp. Coefficient -20mV/°C
<b>Terminal</b>	M6	<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>	188.0Ah/9.40A, 20hr, 1.80V/cell 180.0Ah/18.0A, 10hr, 1.80V/cell 175.2Ah/21.9A, 8hr, 1.75V/cell 156.5Ah/31.3A, 5hr, 1.75V/cell 118.9Ah/118.9A, 1hr, 1.60V/cell	<b>Life Expectancy</b>	10-12 years according to EUROBAT
<b>Max. Discharge Current</b>	1800A (5s)		
<b>Internal Resistance / Impedance (1kHz)</b>	Approx. 4.2mΩ		
<b>Operating Temp. Range</b>	Discharge:    -15~50°C Charge:        0~40°C Storage:       -15~40°C		

## Dimensions

### ■ M6 Terminal

Unit: mm | Dimensions: 550 Length X 125 Width X 280 Height (280 Height incl. Terminal)





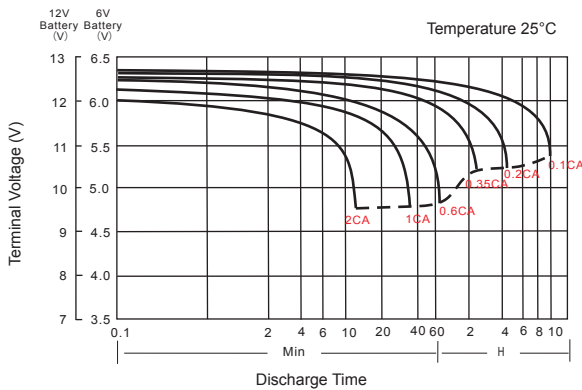
### Constant Current Discharge (Amperes) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	252.8	229.4	199.3	163.3	125.9	93.4	56.5	42.6	33.9	28.4	25.5	20.0	17.0	8.90
1.80V/cell	293.8	266.7	222.4	175.6	133.1	103.4	61.5	46.2	36.6	30.6	26.1	21.5	18.0	9.40
1.75V/cell	324.2	282.1	237.1	182.6	137.3	107.2	63.4	47.4	37.6	31.3	26.6	21.9	18.5	9.70
1.70V/cell	345.2	298.2	246.6	188.9	139.9	111.1	65.5	48.8	38.5	32.0	26.9	22.2	18.8	9.80
1.65V/cell	360.9	307.6	251.8	192.7	142.9	113.5	66.5	49.5	39.0	32.4	27.2	22.4	18.9	9.90
1.60V/cell	376.7	329.7	259.1	198.0	145.0	118.9	69.3	51.4	40.4	33.4	27.4	23.0	19.3	10.1

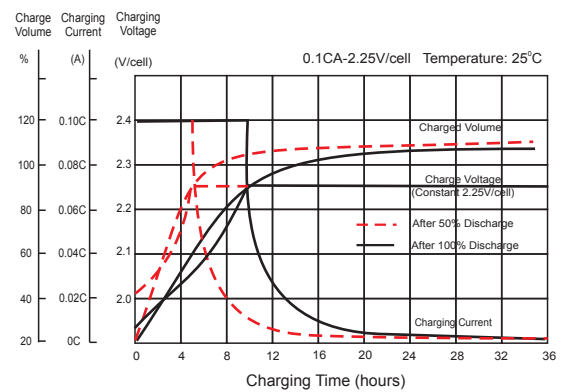
### Constant Power Discharge (Watts/cell) at 25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	472.1	440.5	379.8	314.5	244.5	181.5	110.5	83.6	66.8	55.9	50.6	39.6	33.8	18.0
1.80V/cell	542.2	507.0	417.5	333.0	256.5	199.5	119.6	90.1	71.7	60.1	51.8	42.3	35.9	18.9
1.75V/cell	588.4	530.8	441.0	343.4	262.2	205.4	122.6	92.1	73.3	61.2	52.4	43.0	36.4	19.3
1.70V/cell	612.8	554.6	455.1	353.3	266.1	211.5	125.9	94.3	74.2	62.5	52.9	43.7	37.0	19.5
1.65V/cell	638.3	573.5	462.9	359.8	270.9	214.9	127.5	95.6	75.6	63.1	53.3	44.1	37.3	19.6
1.60V/cell	647.8	598.4	469.7	366.0	272.0	223.2	131.9	98.5	77.8	64.7	53.6	44.9	37.9	19.9

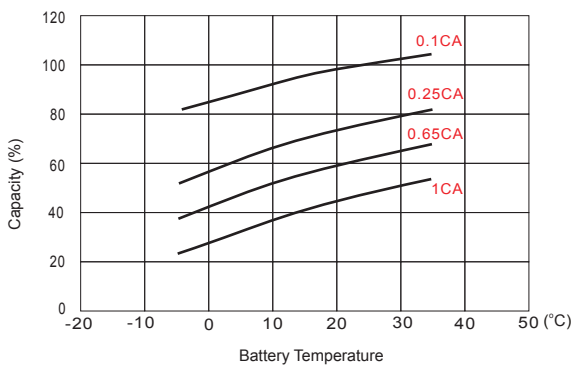
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

