

# Sohigh BAT-800AH-OPzV

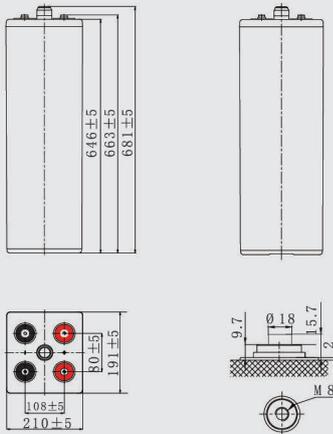
Solar OPzV Battery



## Specifications

Rated Voltage	2V	
Nominal Capacity	800Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	191±5mm(7.52 in.)
	Width	210±5mm(8.27 in.)
	Container Height	646±5mm(25.43 in.)
	Total Height	681±5mm(26.81 in.)
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	1040.0 Ah	(100hr, 10.4A, 1.80V/cell)
	800.0 Ah	(10hr, 80.0A, 1.80V/cell)
	697.5 Ah	(5hr, 139.5A, 1.75V/cell)
	612.0 Ah	(3hr, 204.0A, 1.75V/cell)
	446.0 Ah	(1hr, 446.0A, 1.65V/cell)
Max. Discharge Current (5s)	6400A	
Internal Resistance(25°C)	Approx.0.50mΩ	
Operating Temp.Range	Discharge	-20°C~55°C (-4°F~131°F)
	Charge	0°C~40°C (32°F~104°F)
	Storage	-20°C~50°C (-4°F~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current(25°C)	200.0A	
Charge voltage(25°C)	Float	2.25V
	Temp. Coefficient	-3mV/cell/°C
	Cycle(Equalization)	2.35~2.40V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤ 3% per month at 25°C	

## Dimensions (mm)



## Solar & Wind applications parameters settings

Over voltage disconnect	2.45±0.01V/cell @ 20~25°C
Regulation/equalize voltage	2.40±0.01V/cell @ 20~25°C
Array reconnection voltage	2.25±0.005V/cell @ 20~25°C
Float voltage setting	2.27±0.005V/cell @ 20~25°C
Low voltage alarm voltage	1.95±0.005V/cell @ 20~25°C
Low voltage disconnect	1.90±0.005V/cell @ 20~25°C
Load reconnect voltage	2.09±0.01V/cell @ 20~25°C
Temp. compensate coefficient	-5mV/cell/°C

## Solar OPzV Battery

<b>2V Voltage</b>	<b>800AH Capacity</b>	<b>Tubular Gel</b>	<b>20+ Years Design Life</b>

## Constant Current Discharge (Amperes) at 25°C (77°F)

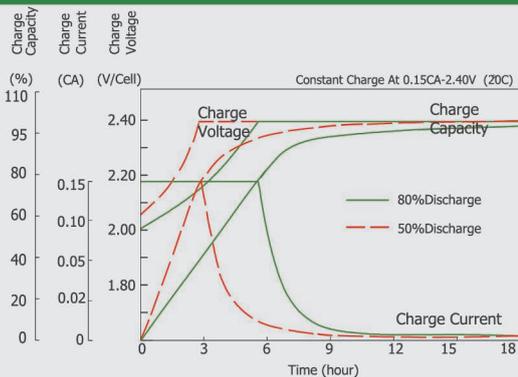
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	357.5	241.8	185.6	127.0	89.0	75.0	35.6	18.6	13.4	10.1	8.75
1.80V/cell	400.8	264.8	201.9	136.8	95.2	80.0	36.8	19.3	13.9	10.4	9.00
1.75V/cell	416.7	274.0	206.4	139.5	96.8	81.4	37.1	19.8	14.2	10.6	9.13
1.70V/cell	435.0	280.9	210.6	141.6	98.2	82.3	37.7	20.2	14.4	10.8	9.26
1.67V/cell	446.3	285.5	214.5	143.9	99.3	83.0	38.0	20.4	14.5	10.9	9.38
1.60V/cell	453.2	290.1	217.0	145.3	100.0	83.7	38.3	20.6	14.6	11.1	9.48

## Constant Power Discharge (Watts/cell) at 25°C (77°F)

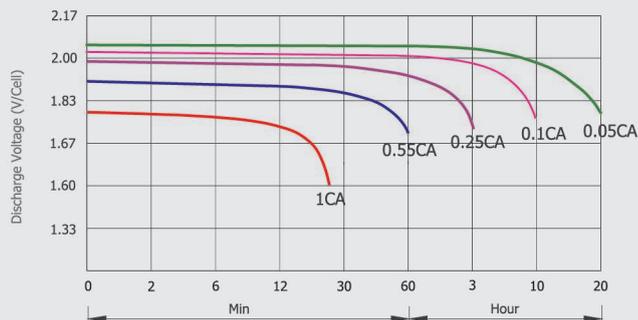
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	690.0	469.7	362.0	249.4	176.4	149.0	71.2	37.3	26.9	20.4	17.6
1.80V/cell	772.0	513.5	391.8	267.7	188.6	158.9	73.5	38.6	27.8	20.9	18.1
1.75V/cell	797.0	525.0	398.7	272.2	191.3	161.1	73.9	39.5	28.5	21.3	18.3
1.70V/cell	824.4	536.5	405.6	276.8	193.4	162.7	75.0	40.2	28.8	21.6	18.6
1.67V/cell	840.3	545.7	412.4	279.1	195.2	164.1	75.6	40.6	29.0	21.9	18.8
1.60V/cell	849.4	550.3	414.7	281.4	196.1	165.0	76.2	41.0	29.1	22.1	19.0

NOTICE: Manual measurement, product specifications and dimensions may have errors, subject to actual receipt.

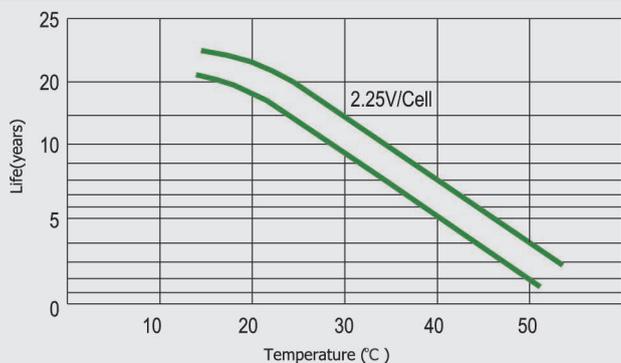
## Discharge Characteristics



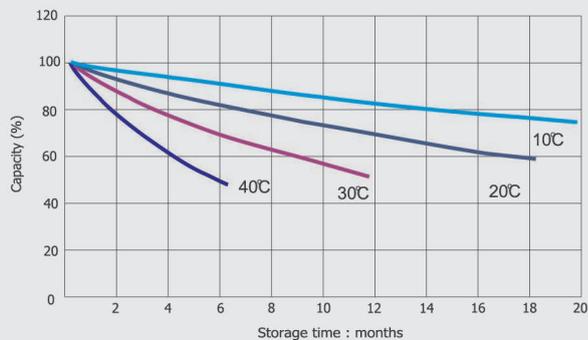
## Charging Characteristics



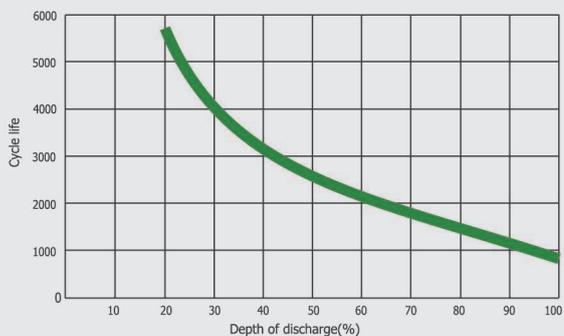
## Temperature vs Float Life



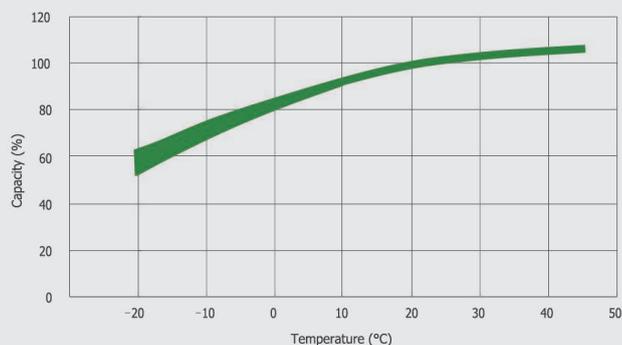
## Self Discharge Characteristics



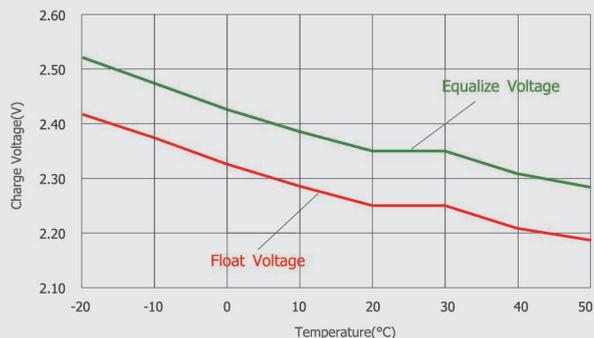
## Cycle Life vs Depth of Discharge



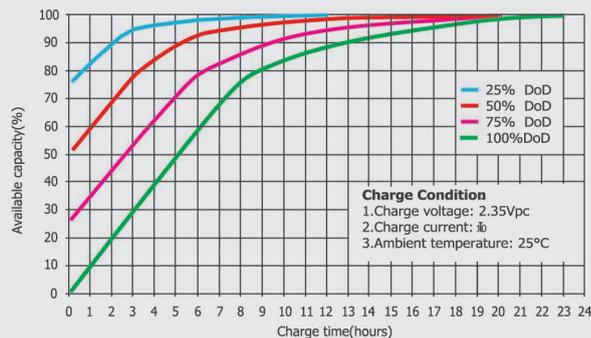
## Capacity vs Temperature



## Charge Voltage Capacity vs Temperature



## Charge Capacity vs Time



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