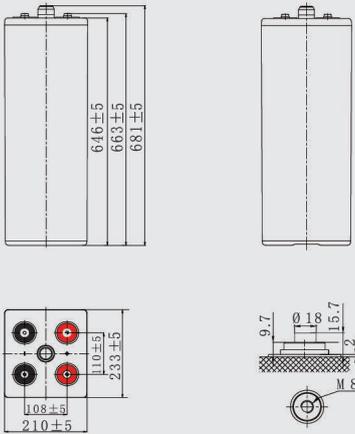


# Sohigh BAT-1000AH-OPzV

Solar OPzV Battery



## Dimensions (mm)



## Specifications

Rated Voltage	2V	
Nominal Capacity	1000Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	233±5mm(9.17 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)	1300.0 Ah	(100hr, 13.0A, 1.80V/cell)
	1000.0 Ah	(10hr, 100.0A, 1.80V/cell)
	875.0 Ah	(5hr, 175.0A, 1.75V/cell)
	771.0 Ah	(3hr, 257.0A, 1.75V/cell)
	558.0Ah	(1hr, 558.0A, 1.65V/cell)
Max. Discharge Current (5s)	8000A	
Internal Resistance(25°C)	Approx.0.45mΩ	
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)	250.0A	
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	

## 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

**2V Voltage**

**1000AH Capacity**

**Tubular Gel**

**20+ Years Design Life**

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

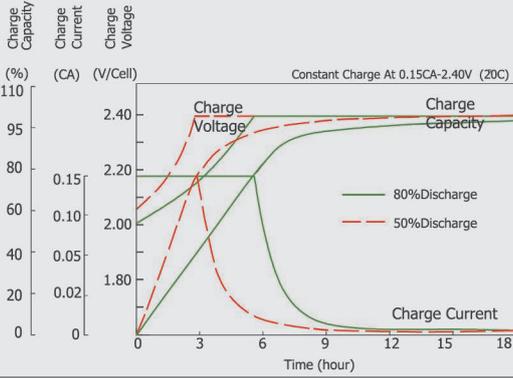
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	446.9	302.2	232.0	158.7	111.2	93.7	44.5	23.3	16.7	12.7	10.9
1.80V/cell	501.0	331.0	252.3	171.0	119.0	100.0	46.0	24.2	17.4	13.0	11.3
1.75V/cell	520.9	342.5	258.1	174.4	121.0	101.7	46.3	24.7	17.8	13.3	11.4
1.70V/cell	543.7	351.1	263.2	177.0	122.7	102.9	47.1	25.2	18.0	13.5	11.6
1.67V/cell	557.9	356.9	268.1	179.9	124.2	103.7	47.5	25.5	18.1	13.7	11.7
1.60V/cell	566.5	362.7	271.2	181.6	125.0	104.6	47.9	25.7	18.3	13.8	11.9

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

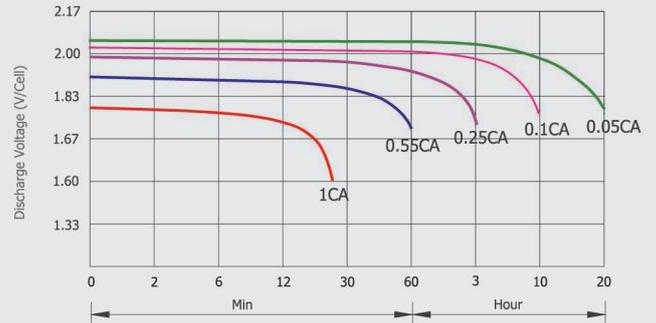
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	862.5	587.2	452.5	311.7	220.5	186.3	89.0	46.6	33.6	25.5	22.0
1.80V/cell	965.0	641.9	489.8	334.6	235.7	198.6	91.9	48.3	34.8	26.1	22.6
1.75V/cell	996.3	656.2	498.4	340.3	239.1	201.4	92.4	49.4	35.7	26.6	22.9
1.70V/cell	1030.5	670.6	507.0	346.0	241.7	203.4	93.8	50.3	36.0	27.0	23.2
1.67V/cell	1050.4	682.1	515.6	348.9	244.0	205.1	94.5	50.7	36.2	27.4	23.5
1.60V/cell	1061.8	687.9	518.4	351.7	245.2	206.3	95.2	51.2	36.4	27.6	23.7

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

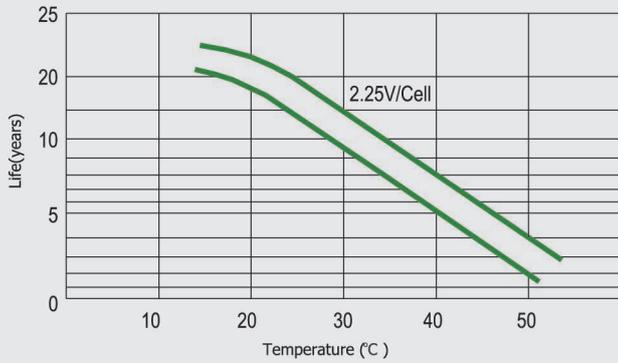
## Discharge Characteristics



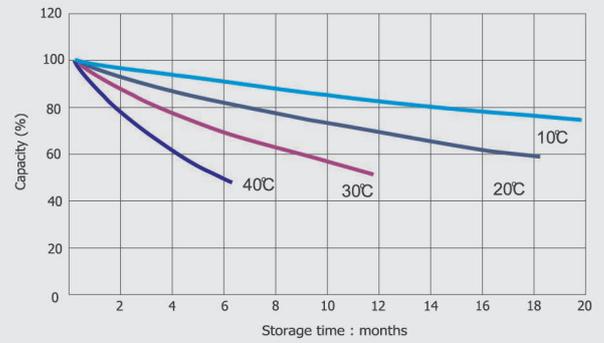
## Charging Characteristics



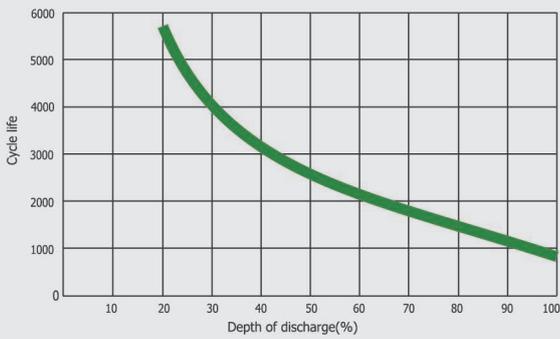
## Temperature vs Float Life



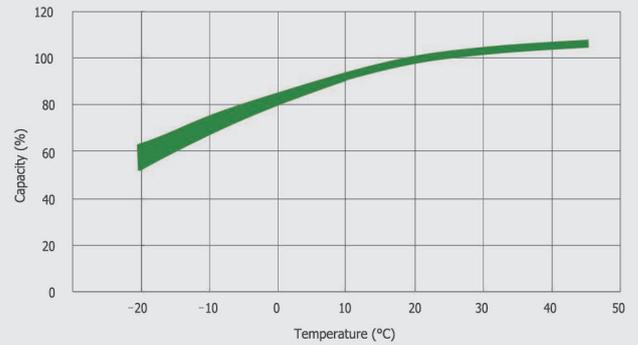
## Self Discharge Characteristics



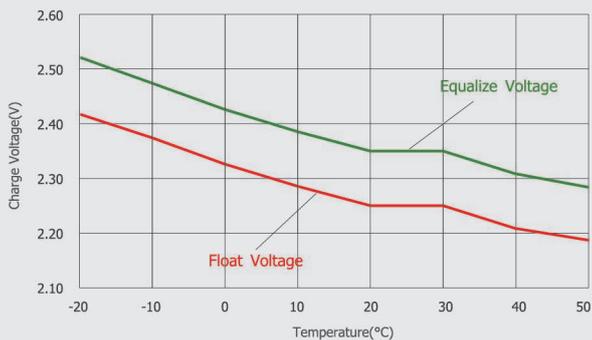
## Cycle Life vs Depth of Discharge



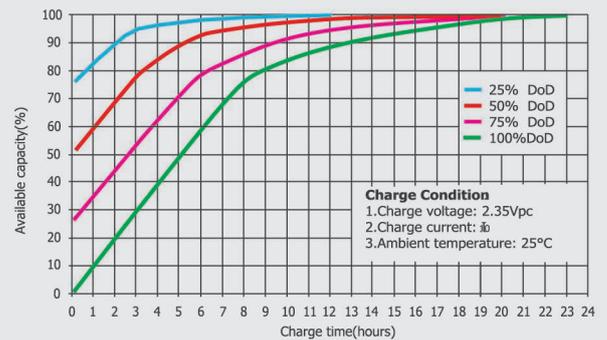
## Capacity vs Temperature



## Charge Voltage Capacity vs Temperature



## Charge Capacity vs Time



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