

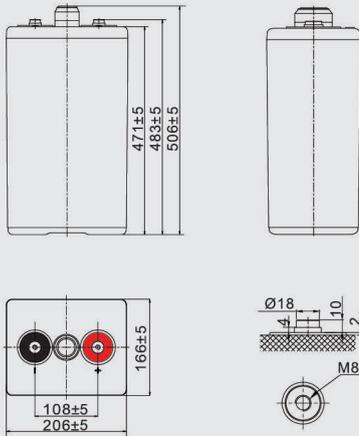
Sohigh BAT-500AH-OPzV

Solar OPzV Battery

Sohigh Solar
High Technology. High Quality



Dimensions (mm)



Specifications

Rated Voltage	2V	
Nominal Capacity	500Ah	(C ₁₀ , 1.80V/cell)
Dimension	Length	166±5mm(6.53 in.)
	Width	206±5mm(8.11 in.)
	Container Height	471±5mm(18.54 in.)
	Total Height	506±5mm(19.92 in.)
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	637.0 Ah	(100hr, 6.37A, 1.80V/cell)
	490.0 Ah	(10hr, 49.0A, 1.80V/cell)
	426.5 Ah	(5hr, 85.3A, 1.75V/cell)
	378.0 Ah	(3hr, 126.0A, 1.75V/cell)
	274.0 Ah	(1hr, 274.0A, 1.65V/cell)
Max. Discharge Current (5s)	3920A	
Internal Resistance(25°C)	Approx.0.73mΩ	
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)	122.5A	
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

500AH Capacity

Tubular Gel

20+ Years Design Life

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

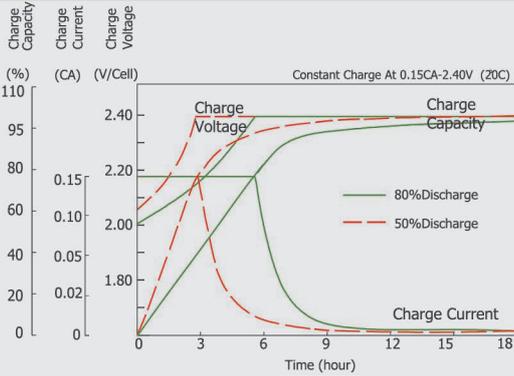
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	219.0	148.1	113.7	77.8	54.5	45.9	21.8	11.4	8.20	6.21	5.36
1.80V/cell	245.5	162.2	123.6	83.8	58.3	49.0	22.6	11.8	8.51	6.37	5.51
1.75V/cell	255.3	167.8	126.5	85.5	59.3	49.8	22.7	12.1	8.72	6.50	5.59
1.70V/cell	266.4	172.1	129.0	86.7	60.1	50.4	23.1	12.3	8.81	6.59	5.67
1.67V/cell	273.4	174.9	131.4	88.1	60.8	50.8	23.3	12.5	8.88	6.70	5.74
1.60V/cell	277.6	177.7	132.9	89.0	61.3	51.2	23.5	12.6	8.94	6.78	5.81

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

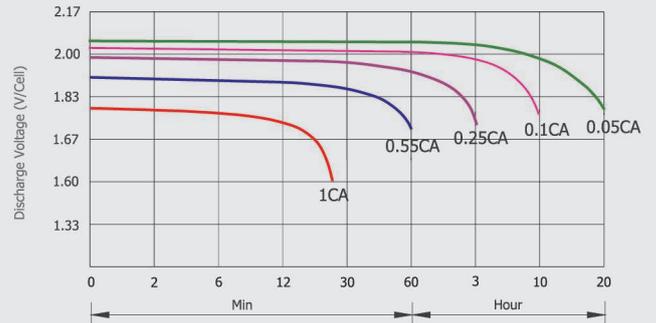
F. V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	422.6	287.7	221.7	152.7	108.0	91.3	43.6	22.8	16.5	12.5	10.8
1.80V/cell	472.8	314.5	240.0	163.9	115.5	97.3	45.0	23.7	17.1	12.8	11.1
1.75V/cell	488.2	321.6	244.2	166.7	117.2	98.7	45.3	24.2	17.5	13.0	11.2
1.70V/cell	504.9	328.6	248.4	169.5	118.5	99.7	46.0	24.6	17.6	13.2	11.4
1.67V/cell	514.7	334.3	252.6	170.9	119.6	100.5	46.3	24.9	17.8	13.4	11.5
1.60V/cell	520.3	337.1	254.0	172.3	120.1	101.1	46.7	25.1	17.9	13.5	11.6

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

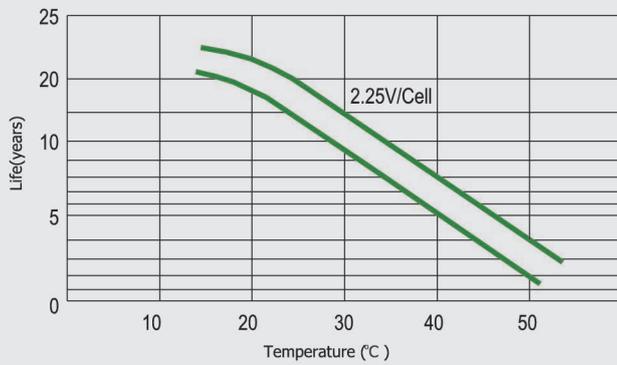
Discharge Characteristics



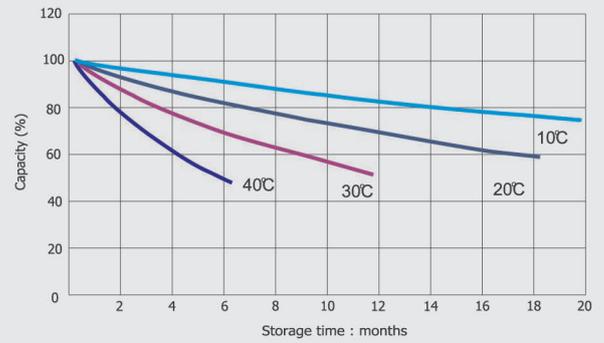
Charging Characteristics



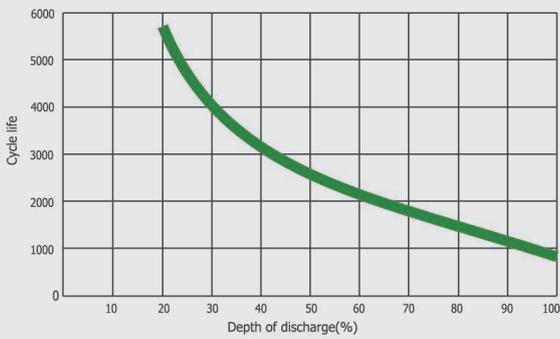
Temperature vs Float Life



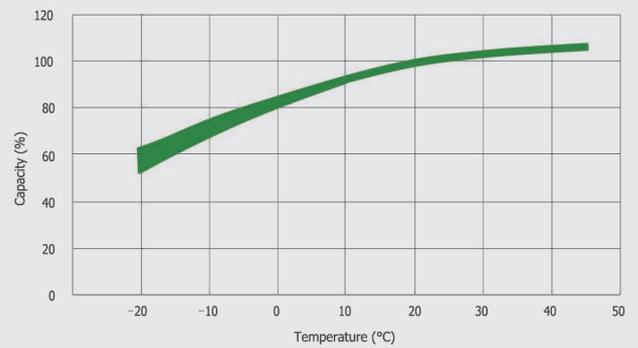
Self Discharge Characteristics



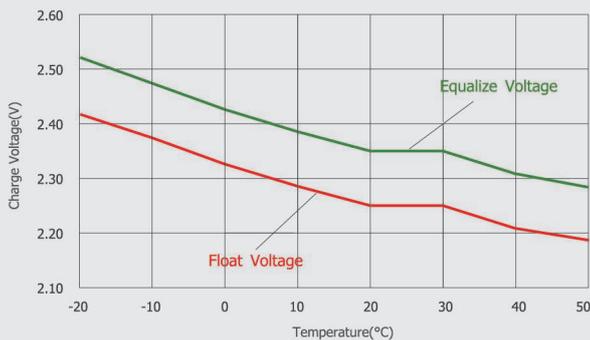
Cycle Life vs Depth of Discharge



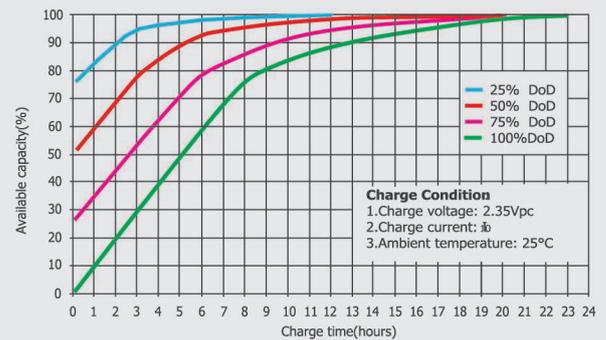
Capacity vs Temperature



Charge Voltage Capacity vs Temperature



Charge Capacity vs Time



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