

# STARMAX

The world's leading battery brand



## DEEP CYCLE GEL BATTERIES

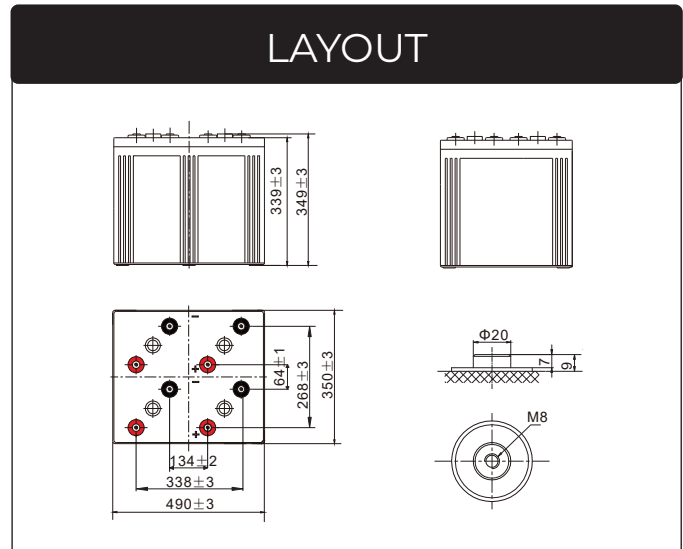
STG2-2000 (2V 2000Ah)



[www.starmaxbatteries.com](http://www.starmaxbatteries.com)

# STG SERIES-GEL BATTERIES

## STG2-2000



## General Features

- ✓ Battery design life up to 16 years
- ✓ Special plate design guarantees battery floating life more than 4000 times
- ✓ High thermal capacity reduce the risk of thermal out of control and drying hard, and the battery can be used in bad environment
- ✓ Little water losing, and no electrolyte stratification phenomenon

## Applications

- ✓ Telecommunications
- ✓ Solar system
- ✓ Wind power system
- ✓ Engine starting
- ✓ Wheelchair, Floor cleaning machines, Golf trolley, Boats

## Standards

- ✓ IEC 60896 Certified
- ✓ Classified as "Long Life" according to Eurobat
- ✓ UL Certified
- ✓ Manufactured at Starmax® IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities



# SPECIFICATIONS

Rated Voltage	2V	
Nominal Capacity	2000Ah	(C <sub>10</sub> ,1.80V/cell)
Dimensions	Length	490±2mm (19.3 inches)
	Width	350±2mm (13.8 inches)
	Container height	339±2mm (13.3 inches)
	Total height	349±2mm (13.7 inches)
Approx. weight	132.5 Kg (292.2 lbs)	
Terminal	M8	
Container material	ABS	
Rated capacity (25°C)	2120.0 Ah	C20(106.0A,1.80V/cell)
	2000.0 Ah	C10(200.0A,1.80V/cell)
	1718.0 Ah	C5(343.6A,1.75V/cell)
	1542.0 Ah	C3(514.0A,1.75V/cell)
	945.7 Ah	C1(945.7A,1.60V/cell)
Max. discharge current	16000A (5s)	
Internal resistance (25°C)	Approx 0.34mΩ	
Operating temp. range	Discharge	-20~60°C (-4~140°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal operating temp. range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 500.0A. Voltage 2.40V~2.50V at 25°C (77°F)Temp. Coefficient -5mV/°C	
Standby Use	Initial Charging Current less than 500.0A. Voltage 2.23V~2.27V at 25°C (77°F)Temp. Coefficient -3mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self discharge	STG series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

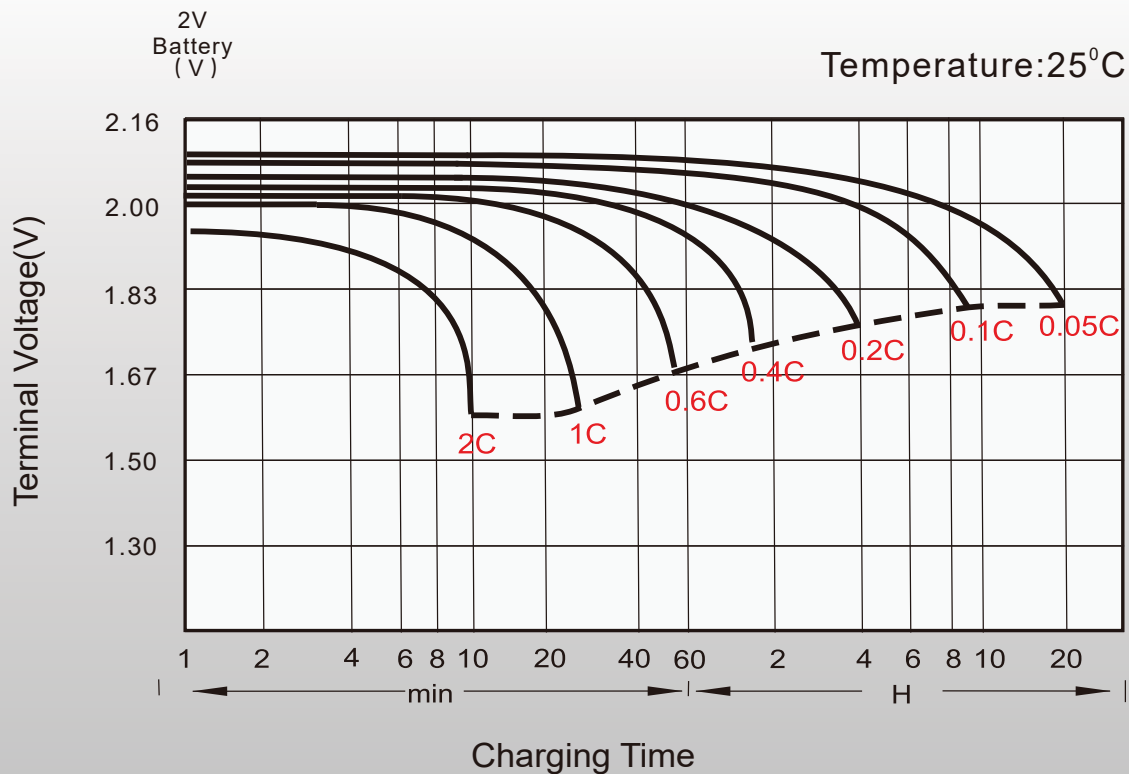
## Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1920.1	1698.4	1403.2	1126.0	994.5	760.6	610.5	462.7	372.1	311.9	272.7	222.5	187.4	100.5
1.80V/cell	2232.9	1957.0	1586.4	1259.0	1100.7	832.2	664.2	500.6	401.1	336.0	292.5	238.2	200.0	106.0
1.75V/cell	2362.0	2053.5	1658.0	1310.2	1141.4	860.2	684.5	514.0	411.2	343.6	298.6	242.6	203.1	107.4
1.70V/cell	2496.4	2160.9	1731.1	1359.9	1183.3	889.3	706.4	529.0	421.6	351.4	305.0	246.9	206.3	108.7
1.67V/cell	2575.1	2222.0	1774.8	1390.5	1208.0	905.3	718.2	537.0	427.4	355.8	308.6	249.5	208.1	109.5
1.60V/cell	2760.0	2366.1	1875.1	1462.3	1266.8	945.7	748.1	556.8	441.6	366.7	317.3	255.4	212.5	111.5

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	3689.0	3272.3	2711.9	2183.2	1933.2	1483.1	1193.1	907.2	731.4	614.0	537.6	439.7	370.9	199.8
1.80V/cell	4245.0	3734.3	3040.3	2423.4	2125.0	1613.4	1291.5	977.6	785.6	659.4	575.2	469.8	395.2	210.6
1.75V/cell	3880.5	2910.4	3150.7	2502.5	2188.0	1657.5	1323.8	999.4	802.2	672.3	585.6	477.4	400.7	213.1
1.70V/cell	4643.8	4042.9	3259.7	2577.0	2252.8	1703.3	1359.0	1023.8	819.5	685.6	596.7	484.8	406.3	215.6
1.67V/cell	4758.5	4131.1	3324.2	2621.8	2288.8	1727.5	1376.8	1036.4	828.9	692.6	602.7	489.2	409.4	217.1
1.60V/cell	5010.5	4329.9	3466.9	2728.0	2377.6	1789.7	1423.7	1068.3	852.1	710.7	617.1	499.3	417.0	220.8

## Discharge Characteristics

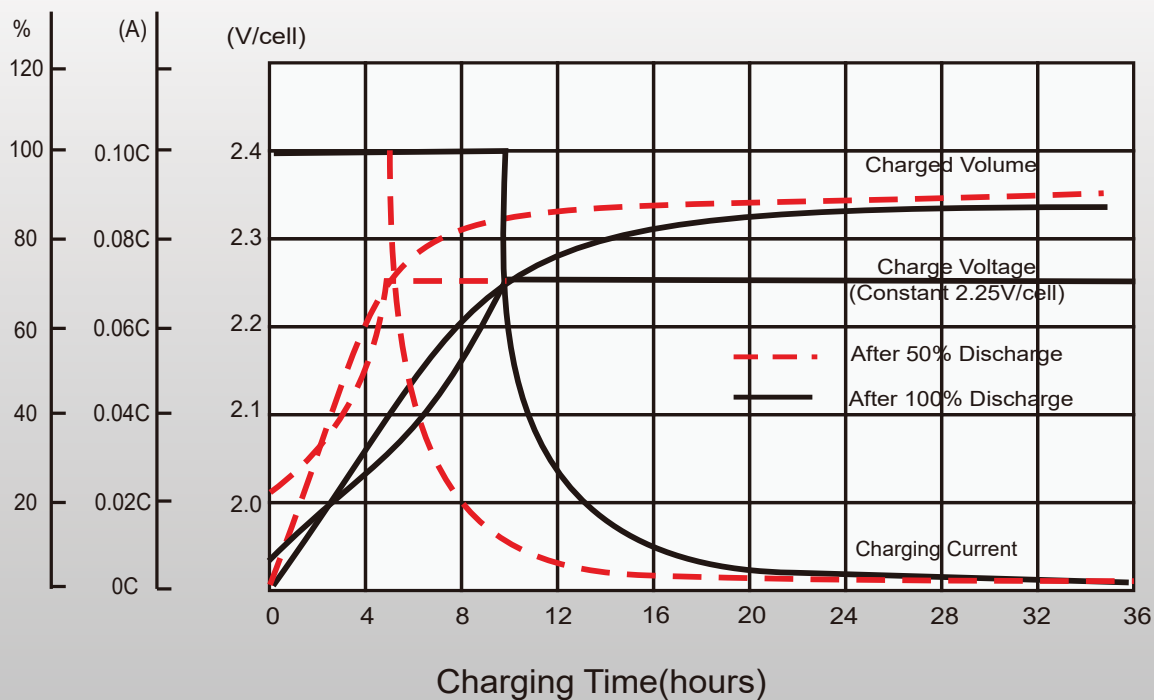




# Float Charging Characteristics

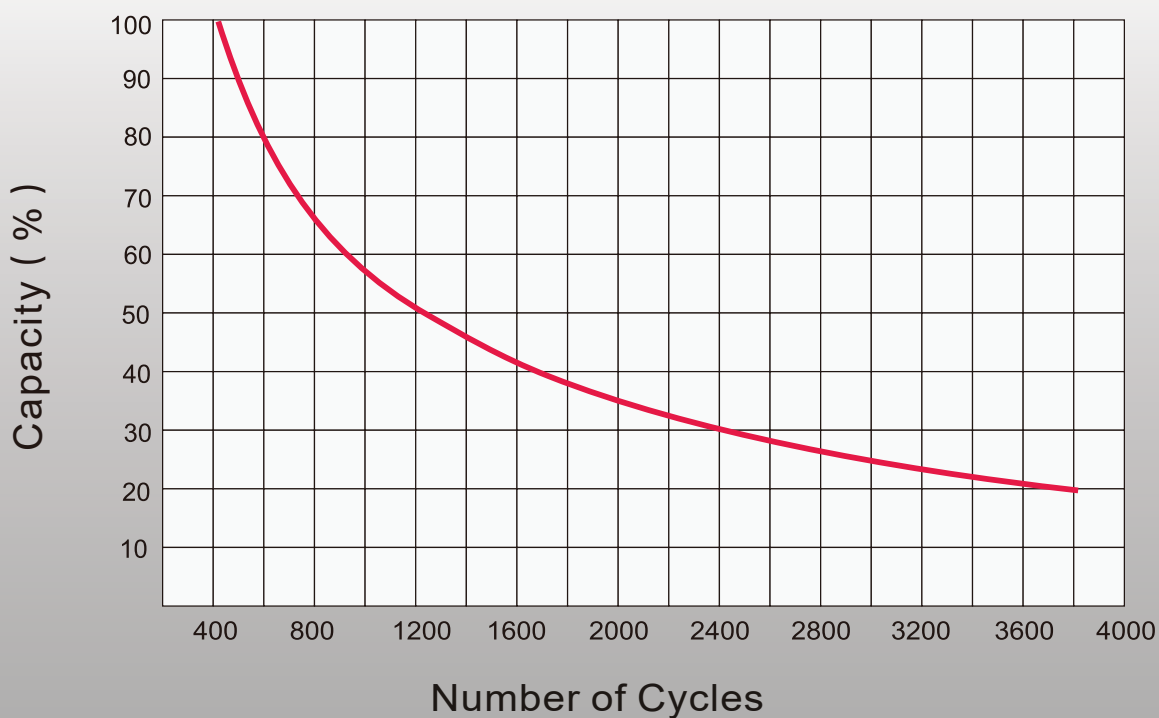
Charge Volume  
Charging Current  
Charging Voltage

0.1CA-2.25V/cell Temperature: 25°C

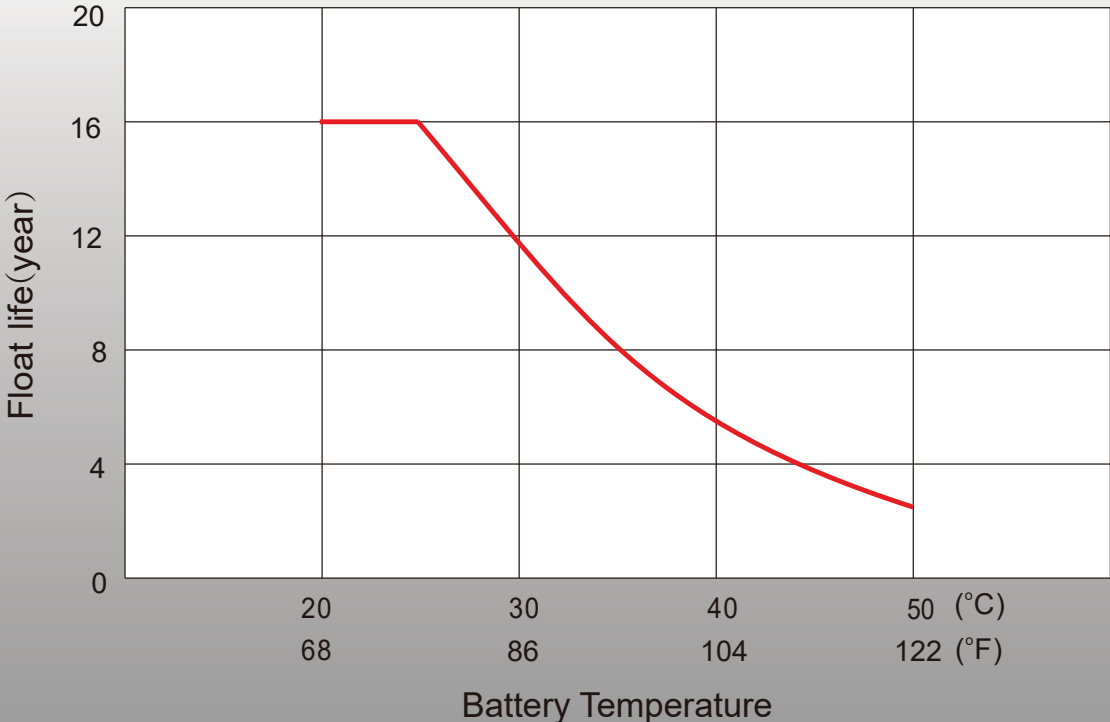


# Cycle Life in Relation to Depth of Discharge

Acc.to IEC 896-2 (25 °C / 77°F)



# Effect of Temperature on Long Term Float Life





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