

STARMAX

The world's leading battery brand



DEEP CYCLE GEL BATTERIES

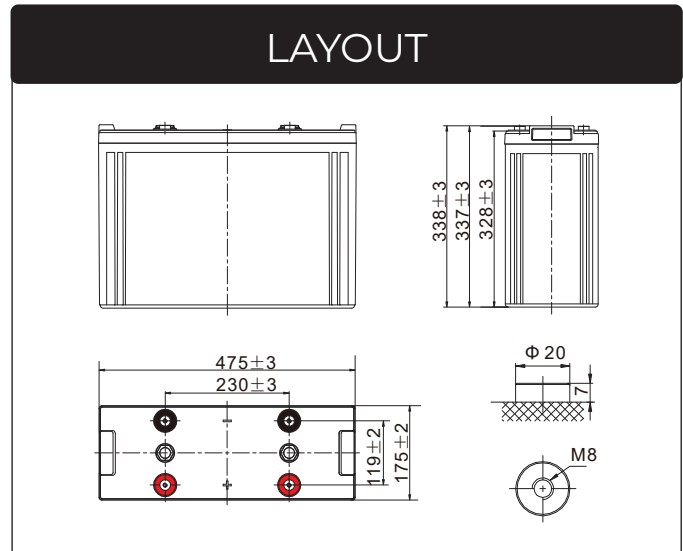
STG2-1000 (2V 1000Ah)



www.starmaxbatteries.com

STG SERIES-GEL BATTERIES

STG2-1000



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	1000Ah	(C ₁₀ ,1.80V/cell)
Dimensions	Length	475±3mm (18.7 inches)
	Width	175±2mm (6.89 inches)
	Container height	328±3mm (12.9 inches)
	Total height	338±3mm (13.3 inches)
Approx. weight	65.7 Kg (144.8 lbs)	
Terminal	M8	
Container material	ABS	
Rated capacity (25°C)	1060.0 Ah	C20(53.0A,1.80V/cell)
	1000.0 Ah	C10(100.0A,1.80V/cell)
	859.0 Ah	C5(171.8A,1.75V/cell)
	771.0 Ah	C3(257.0A,1.75V/cell)
	472.9 Ah	C1(472.9A,1.60V/cell)
Max. discharge current	8000A (5s)	
Internal resistance (25°C)	Approx 0.54mΩ	
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 250.0A. Voltage 2.40V~2.50V at 25°C (77°F)Temp. Coefficient -5mV/°C	
Standby Use	Initial Charging Current less than 250.0A. 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.	

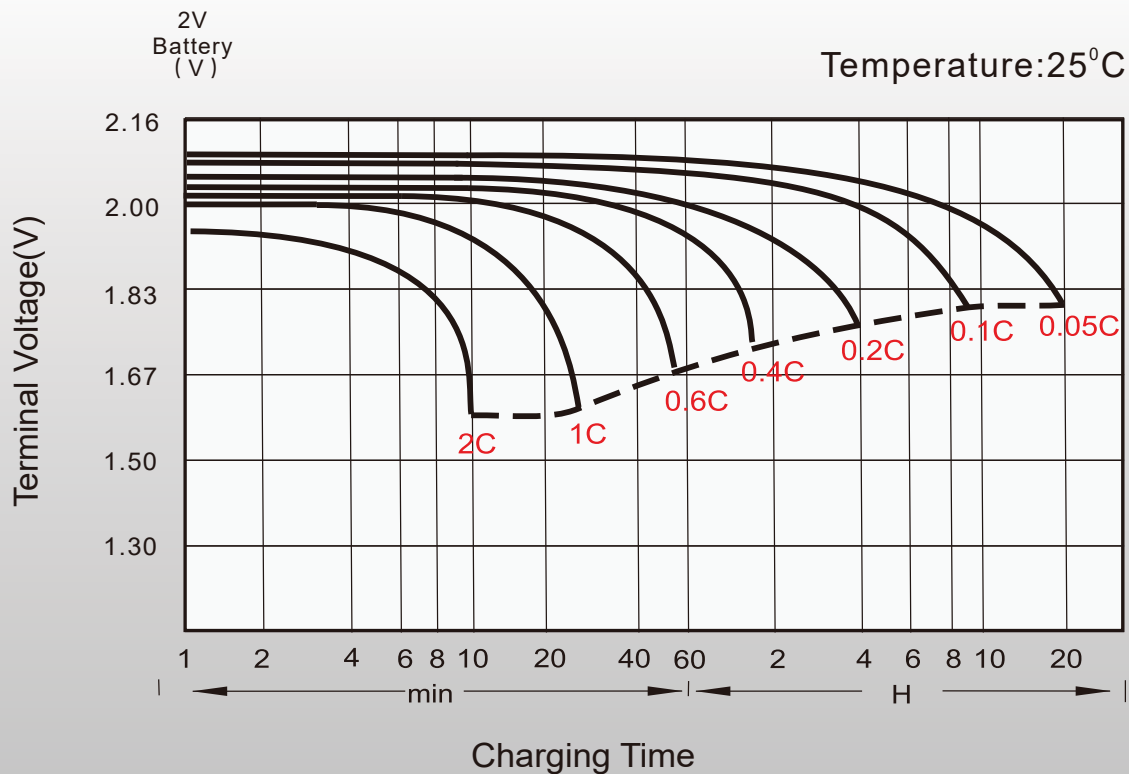
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	960.1	849.2	701.6	563.0	497.3	380.3	305.2	231.4	186.1	156.0	136.3	111.3	93.7	50.2
1.80V/cell	1116.5	978.5	793.2	629.5	550.4	416.1	332.1	250.3	200.6	168.0	146.2	119.1	100.0	53.0
1.75V/cell	1181.0	1026.8	829.0	655.1	570.7	430.1	342.3	257.0	205.6	171.8	149.3	121.3	101.6	53.7
1.70V/cell	1248.2	1080.5	865.6	680.0	591.6	444.6	353.2	264.5	210.8	175.7	152.5	123.4	103.1	54.4
1.67V/cell	1287.5	1111.0	887.4	695.2	604.0	452.7	359.1	268.5	213.7	177.9	154.3	124.7	104.0	54.8
1.60V/cell	1380.0	1183.0	937.6	731.1	633.4	472.9	374.1	278.4	220.8	183.3	158.6	127.7	106.3	55.7

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	1844.5	1636.1	1355.9	1091.6	966.6	741.6	596.5	453.6	365.7	307.0	268.8	219.8	185.4	99.9
1.80V/cell	2122.5	1867.2	1520.1	1211.7	1062.5	806.7	645.8	488.8	392.8	329.7	287.6	234.9	197.6	105.3
1.75V/cell	2221.9	1940.3	1575.3	1251.2	1094.0	828.7	661.9	499.7	401.1	336.1	292.8	238.7	200.3	106.6
1.70V/cell	2321.9	2021.5	1629.8	1288.5	1126.4	851.6	679.5	511.9	409.8	342.8	298.4	242.4	203.1	107.8
1.67V/cell	2379.2	2065.6	1662.1	1310.9	1144.4	863.7	688.4	518.2	414.4	346.3	301.4	244.6	204.7	108.6
1.60V/cell	2505.3	2165.0	1733.5	1364.0	1188.8	894.8	711.9	534.1	426.1	355.4	308.6	249.6	208.5	110.4

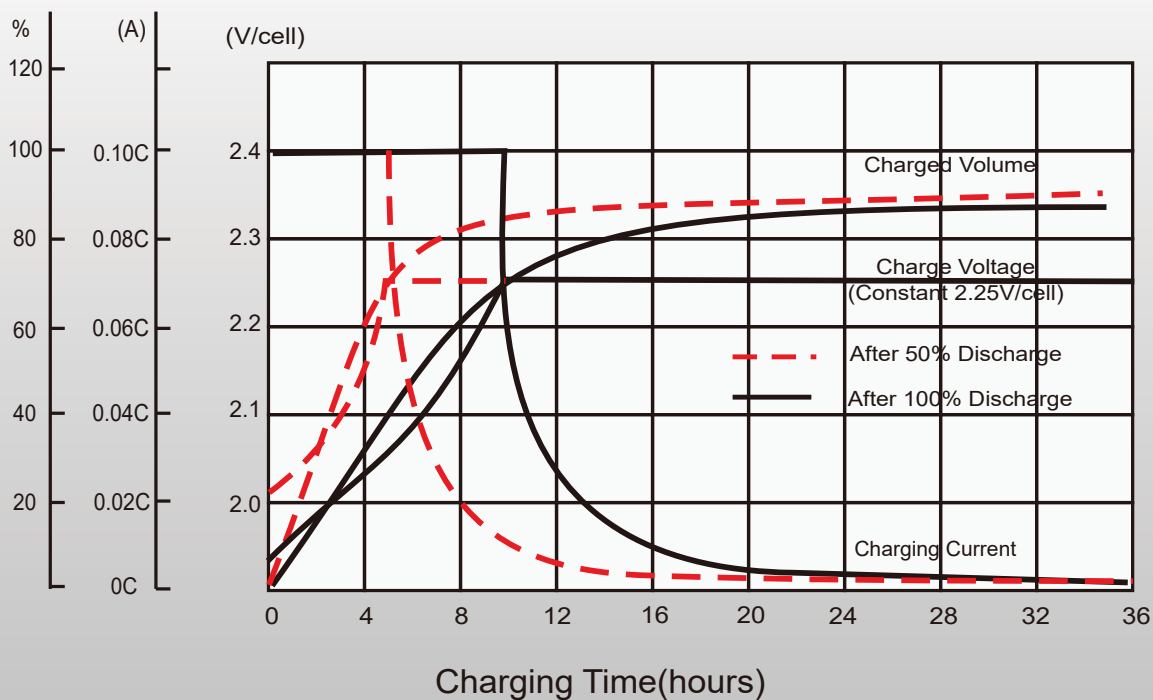
Discharge Characteristics



Float Charging Characteristics

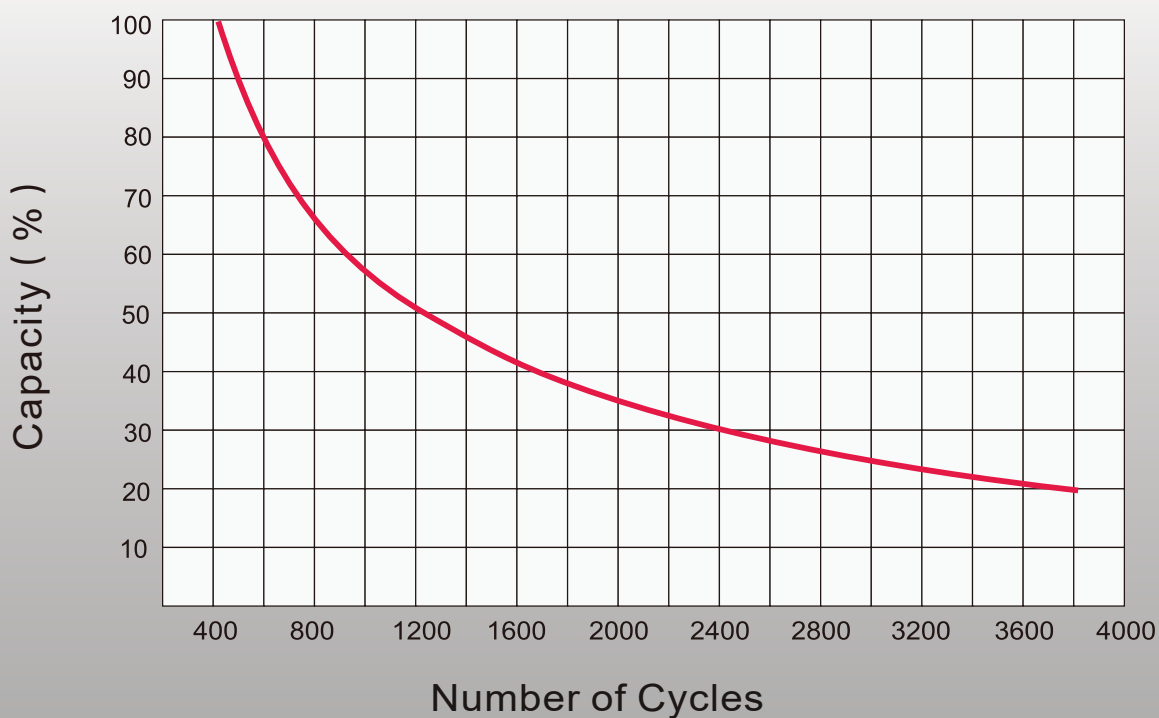
Charge Volume
Charging Current
Charging Voltage

0.1CA-2.25V/cell Temperature: 25°C

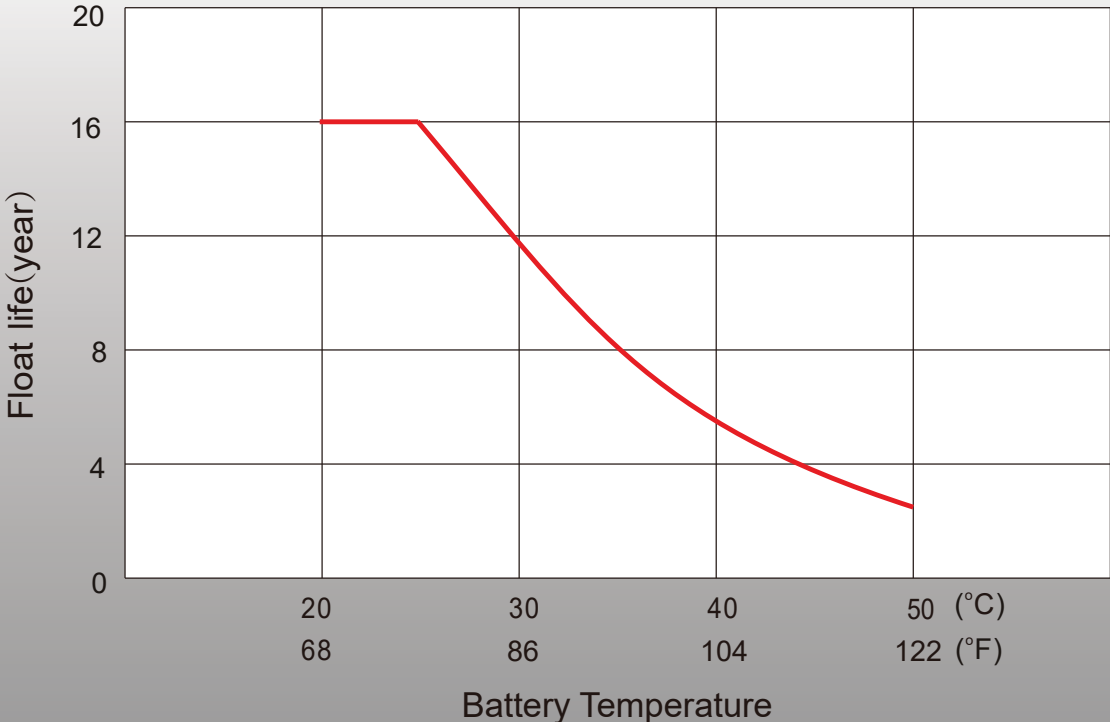


Cycle Life in Relation to Depth of Discharge

Acc.to IEC 896-2 (25 °C / 77°F)



Effect of Temperature on Long Term Float Life





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