

STARMAX

The world's leading battery brand



DEEP CYCLE GEL BATTERIES

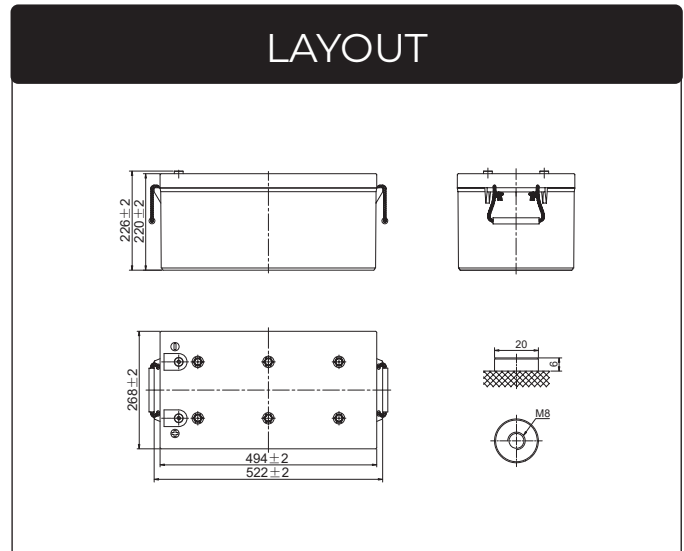
STG12-240 (12V 240AH)



www.starmaxbatteries.com

STG SERIES-GEL BATTERIES

STG12-240



General Features

- ✓ Battery design life up to 12 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, CE Certified
- ✓ Manufactured at Starmax® IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities



SPECIFICATIONS

Rated Voltage	12V	
Nominal Capacity	(C ₂₀ ,1.80V/cell)	240Ah
Dimensions	Length	522±3mm (20.6 inches)
	Width	268±2mm (10.6 inches)
	Container height	220±3mm (8.66 inches)
	Total height	226±3mm (8.90 inches)
Approx. weight	73.3kg (161.6 lbs)	
Terminal	M8	
Container material	ABS	
Rated capacity (25°C)	240.0 Ah	C20(12.0A,1.80V/cell)
	230.0 Ah	C10(23.0A,1.80V/cell)
	203.5 Ah	C5(40.7A,1.75V/cell)
	181.8 Ah	C3(60.6A,1.75V/cell)
	145.6 Ah	C1(145.6A,1.60V/cell)
Max. discharge current	2400A (5s)	
Internal resistance (25°C)	Approx 4.0mΩ	
Operating temp. range	Discharge	-20~55°C (-4~131°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~50°C (5~122°F)
Nominal operating temp. range	25±3°C (77±5°F)	
Standby Use	Initial Charging Current less than 60A. Voltage 2.23V~2.27V at 25°C (77°F)Temp. Coefficient -3mV/°C	
Equalization Use	Initial Charging Current less than 60A. Voltage 2.30V~2.37V at 25°C (77°F)Temp. Coefficient -4mV/°C	
Cycle Use	Initial Charging Current less than 60A. Voltage 2.40V~2.50V at 25°C (77°F)Temp. Coefficient -5mV/°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.	

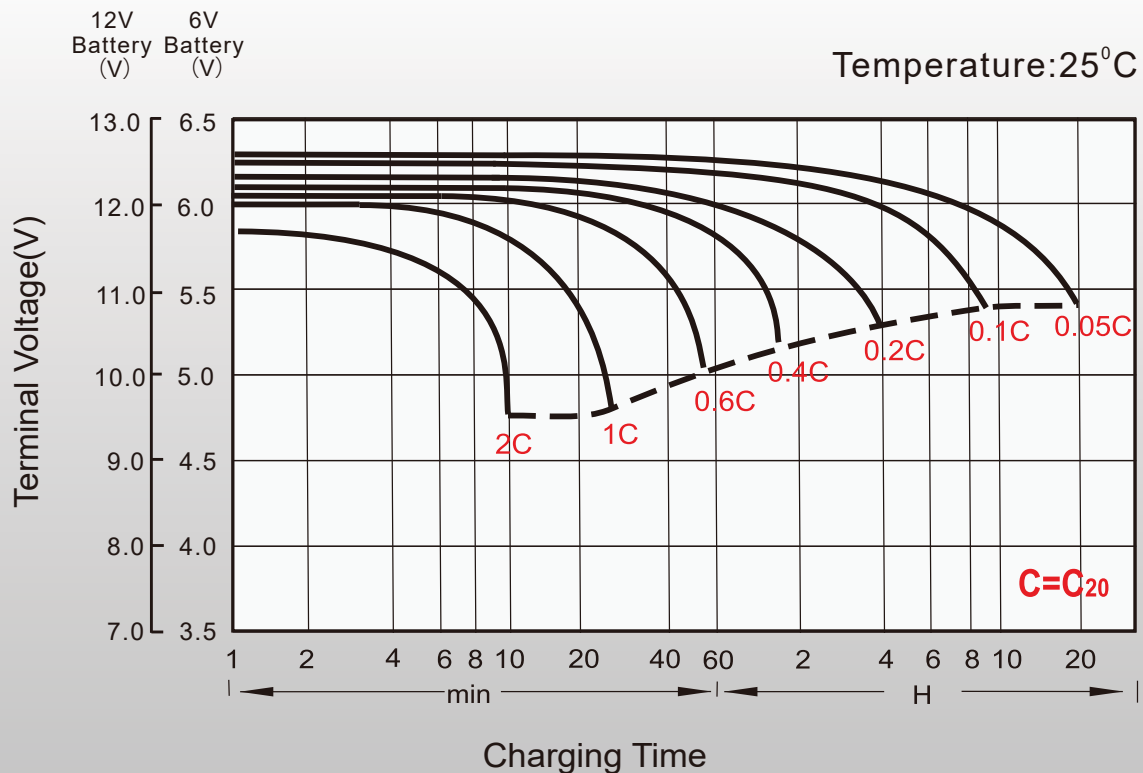
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	302.7	262.4	206.4	186.7	136.5	108.1	83.8	66.8	53.1	43.1	37.5	32.8	26.6	22.5	11.6
1.80V/cell	343.6	297.4	233.3	203.3	144.7	119.6	88.9	73.6	58.3	46.9	39.5	34.7	27.7	23.0	12.0
1.75V/cell	372.6	321.9	251.9	207.4	149.9	134.1	97.4	79.0	60.6	48.3	40.7	35.8	28.2	23.7	12.5
1.70V/cell	389.7	338.2	265.1	208.9	152.2	138.3	99.7	80.5	61.6	48.4	41.3	35.9	28.5	23.7	12.7
1.67V/cell	409.8	351.9	274.4	214.7	155.1	141.0	101.7	82.1	62.5	49.2	41.9	36.4	28.7	23.9	12.8
1.60V/cell	423.9	362.8	281.4	217.8	157.4	145.6	104.4	83.8	63.3	50.0	42.8	37.0	28.9	24.2	13.0

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

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	569.4	496.9	392.5	356.8	262.5	210.1	163.5	130.6	104.0	84.8	73.8	64.7	52.5	44.6	23.2
1.80V/cell	637.0	555.8	439.1	385.3	276.3	230.9	172.4	143.1	113.8	91.8	77.6	68.2	54.7	45.4	23.8
1.75V/cell	679.8	593.2	468.6	390.2	284.6	257.1	187.5	152.7	117.8	94.2	79.7	70.3	55.5	46.7	24.9
1.70V/cell	698.7	614.8	487.2	389.2	286.7	262.8	190.7	154.7	119.2	94.0	80.4	70.2	55.9	46.7	25.2
1.67V/cell	726.3	633.8	500.7	397.5	290.8	267.1	194.0	157.4	120.6	95.3	81.5	71.1	56.2	47.1	25.4
1.60V/cell	736.5	642.6	507.7	399.2	292.3	273.2	197.4	159.5	121.4	96.5	82.9	71.9	56.5	47.4	25.7

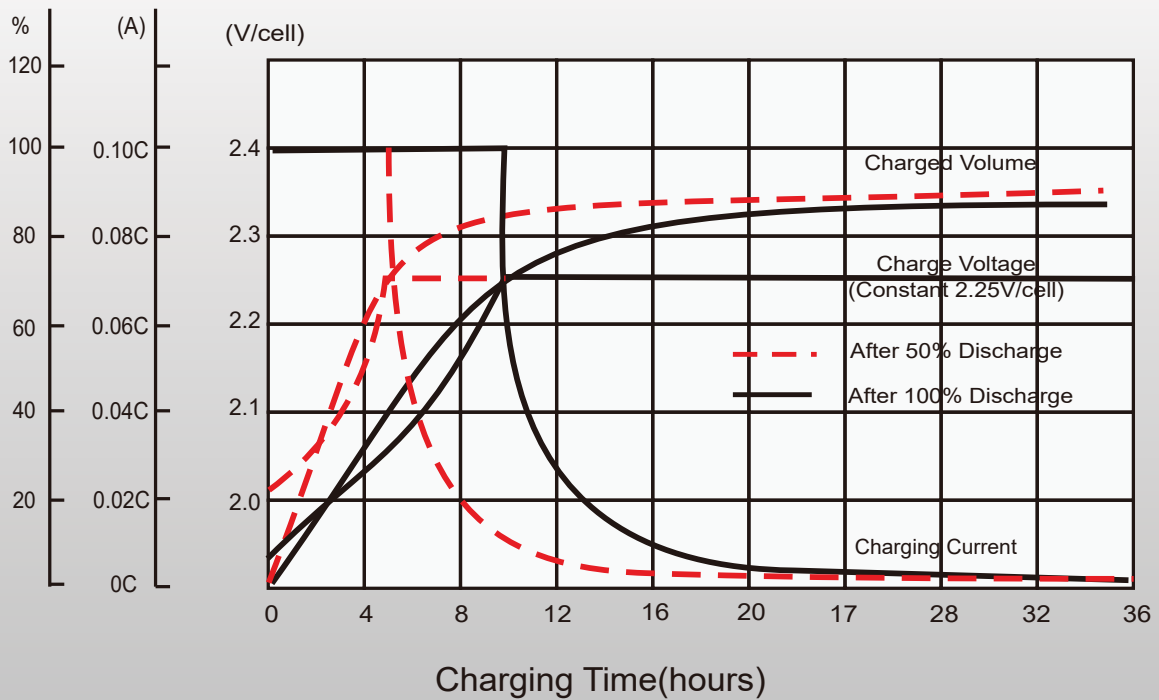
Discharge Characteristics



Float Charging Characteristics

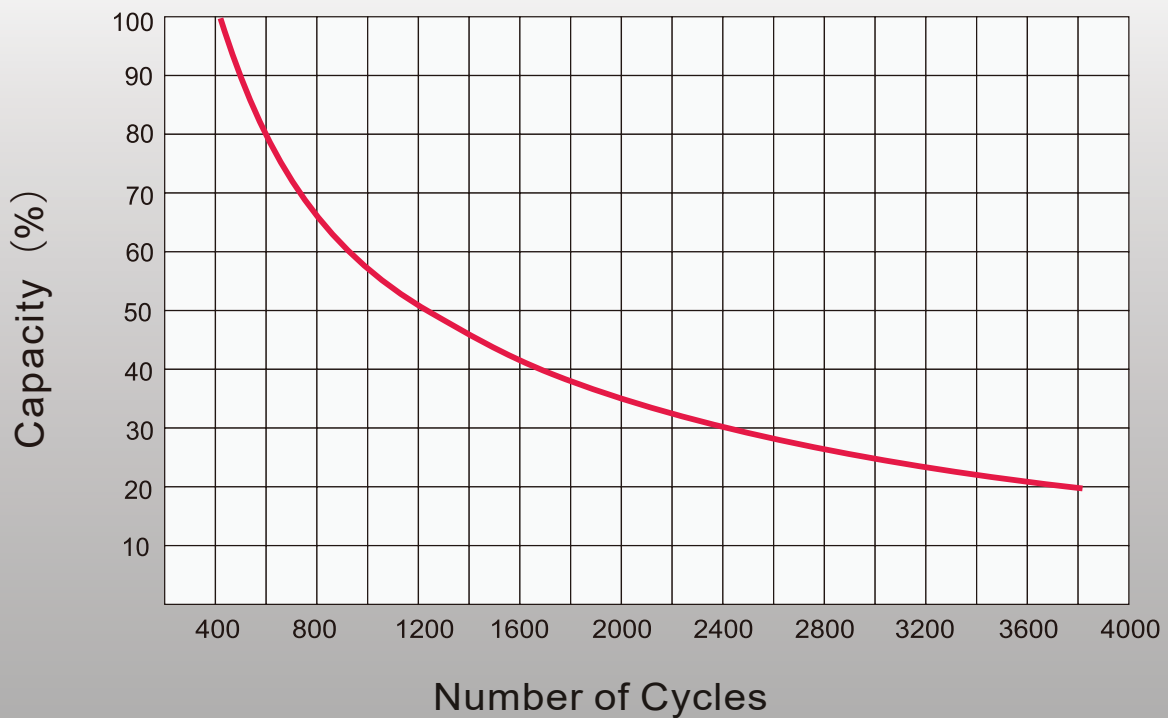
Charge Volume
Charging Current
Charging Voltage

0.1CA-2.25V/cell Temperature: 25°C

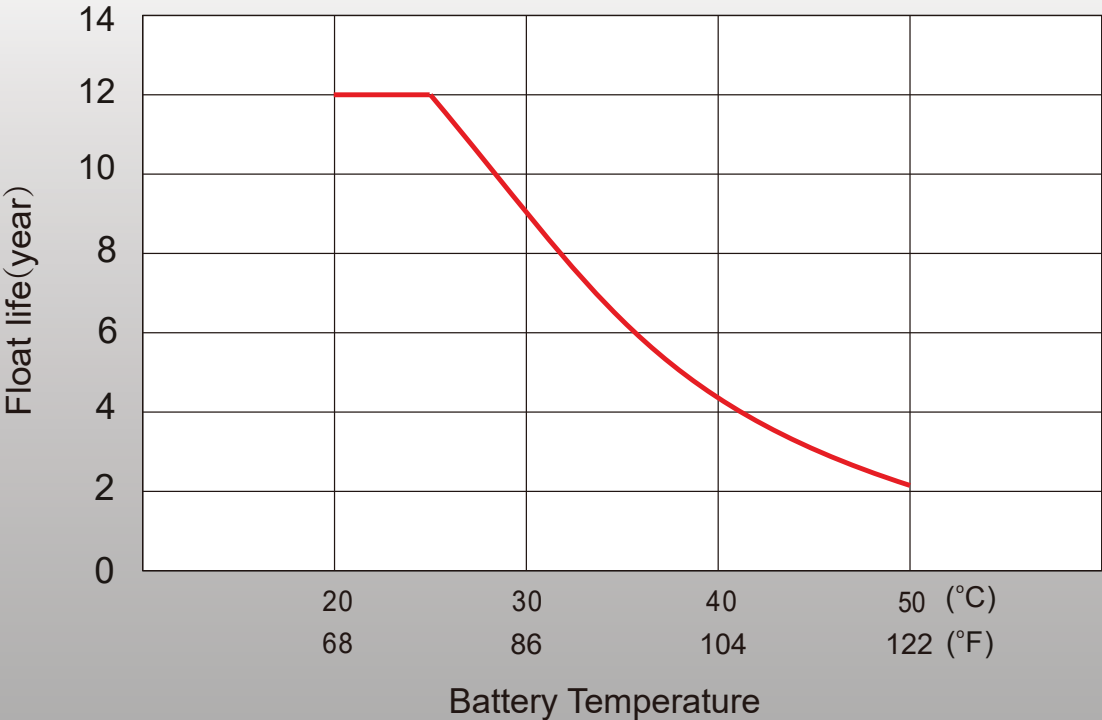


Cycle Life in Relation to Depth of Discharge

Acc.to IEC 896-2 (25 °C / 77 °F)



Effect of Temperature on Long Term Float Life





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