

STARMAX

The world's leading battery brand



DEEP CYCLE GEL BATTERIES

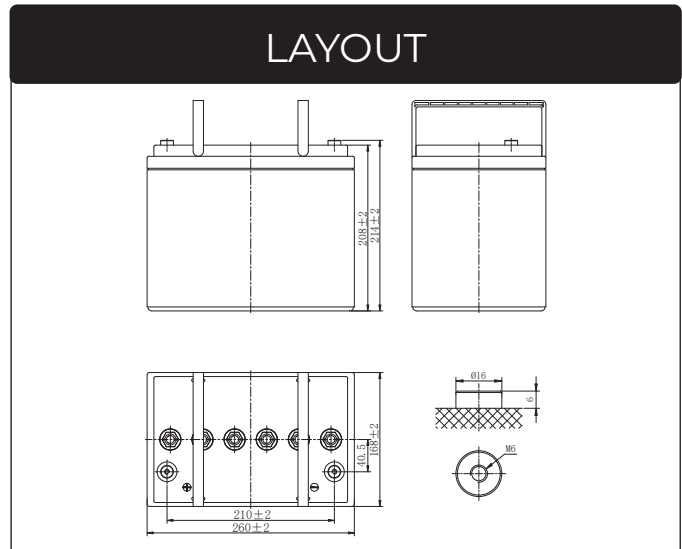
STG12-70 (12V 70AH)



www.starmaxbatteries.com

STG SERIES-GEL BATTERIES

STG12-70



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 8501 and ISO 45001 certified production facilities



SPECIFICATIONS

Rated Voltage	12V	
Nominal Capacity	(C ₂₀ ,1.80V/cell)	70Ah
Dimensions	Length	260±2mm (10.2 inches)
	Width	168±2mm (6.61 inches)
	Container height	208±2mm (8.19 inches)
	Total height	214±2mm (8.43 inches)
Approx. weight	22.9kg (50.5 lbs)	
Terminal	M6	
Container material	ABS	
Rated capacity (25°C)	70.0 Ah	C20(3.50A,1.80V/cell)
	60.0 Ah	C10(6.00A,1.80V/cell)
	50.0 Ah	C5(10.0A,1.75V/cell)
	45.0 Ah	C3(15.0A,1.75V/cell)
	44.1 Ah	C1(44.1A,1.60V/cell)
Max. discharge current	700A (5s)	
Internal resistance (25°C)	Approx 9.4mΩ	
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 18.75A. Voltage 2.23V~2.27V at 25°C (77°F)Temp. Coefficient -3mV/°C	
Equalization Use	Initial Charging Current less than 18.75A. Voltage 2.30V~2.37V at 25°C (77°F)Temp. Coefficient -4mV/°C	
Cycle Use	Initial Charging Current less than 18.75A . 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.	

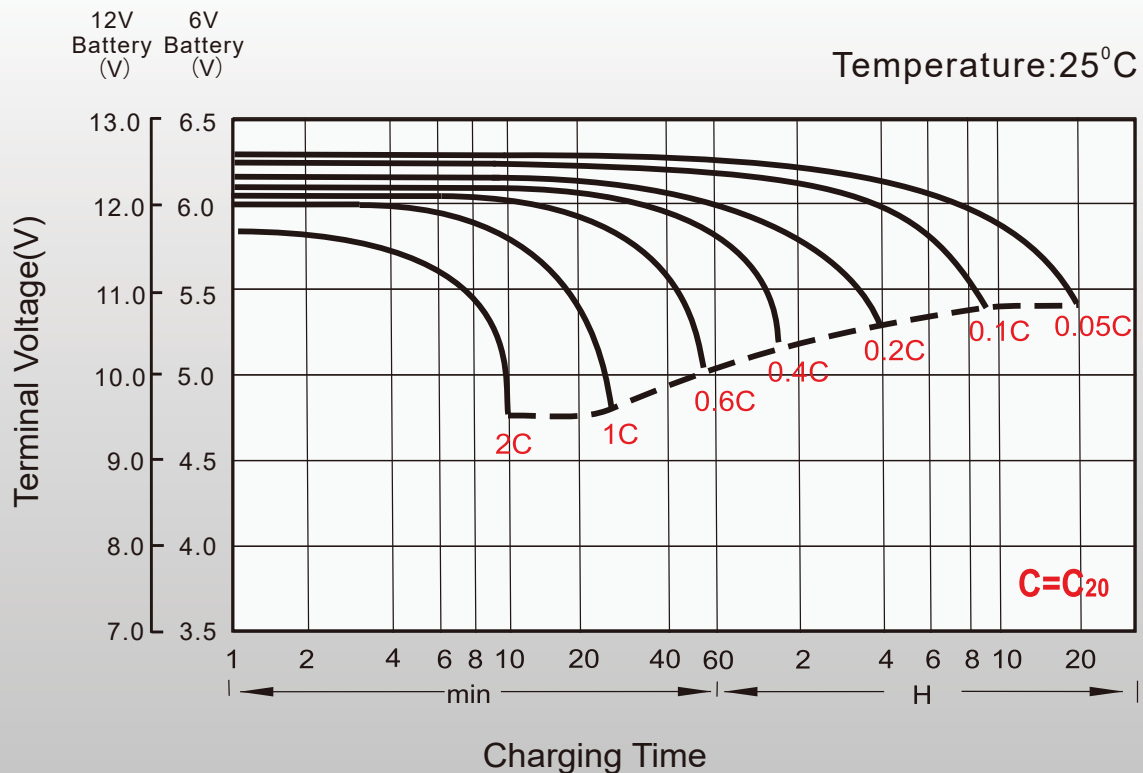
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	91.6	79.5	62.5	50.1	39.9	34.3	25.0	19.4	13.4	10.8	9.08	7.91	6.46	5.46	3.32
1.80V/cell	104.1	90.0	70.6	58.2	45.3	38.1	27.5	21.1	14.5	11.6	9.75	8.45	6.87	6.00	3.50
1.75V/cell	112.8	97.5	76.3	60.9	47.0	39.7	28.6	21.9	15.0	11.9	10.0	8.62	7.00	6.03	3.54
1.70V/cell	118.0	102.4	80.3	63.7	48.8	41.2	29.6	22.7	15.4	12.3	10.3	8.87	7.09	6.03	3.58
1.67V/cell	124.1	106.6	83.1	65.5	49.7	42.0	30.2	23.1	15.7	12.5	10.4	8.96	7.15	6.08	3.61
1.60V/cell	128.4	109.8	85.3	69.5	52.1	44.1	31.6	24.2	16.4	13.0	10.8	9.29	7.29	6.14	3.68

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	172.4	150.4	118.9	95.7	76.8	66.3	48.6	37.6	26.3	21.0	17.8	15.6	12.8	10.8	6.59
1.80V/cell	192.9	168.4	132.9	110.0	86.5	73.4	53.0	40.8	28.3	22.6	19.0	16.6	13.5	11.8	6.93
1.75V/cell	205.9	179.6	141.9	114.0	89.1	75.9	54.8	42.1	29.0	23.2	19.4	16.9	13.8	11.8	6.99
1.70V/cell	211.5	186.2	147.6	118.2	91.6	78.4	56.5	43.4	29.8	23.7	19.9	17.2	13.9	11.8	7.07
1.67V/cell	219.9	191.9	151.6	120.7	92.9	79.6	57.5	44.1	30.2	24.0	20.2	17.5	14.0	11.9	7.12
1.60V/cell	223.0	194.6	153.7	126.1	96.5	82.8	59.8	41.0	31.3	24.8	20.8	18.0	14.3	12.0	7.25

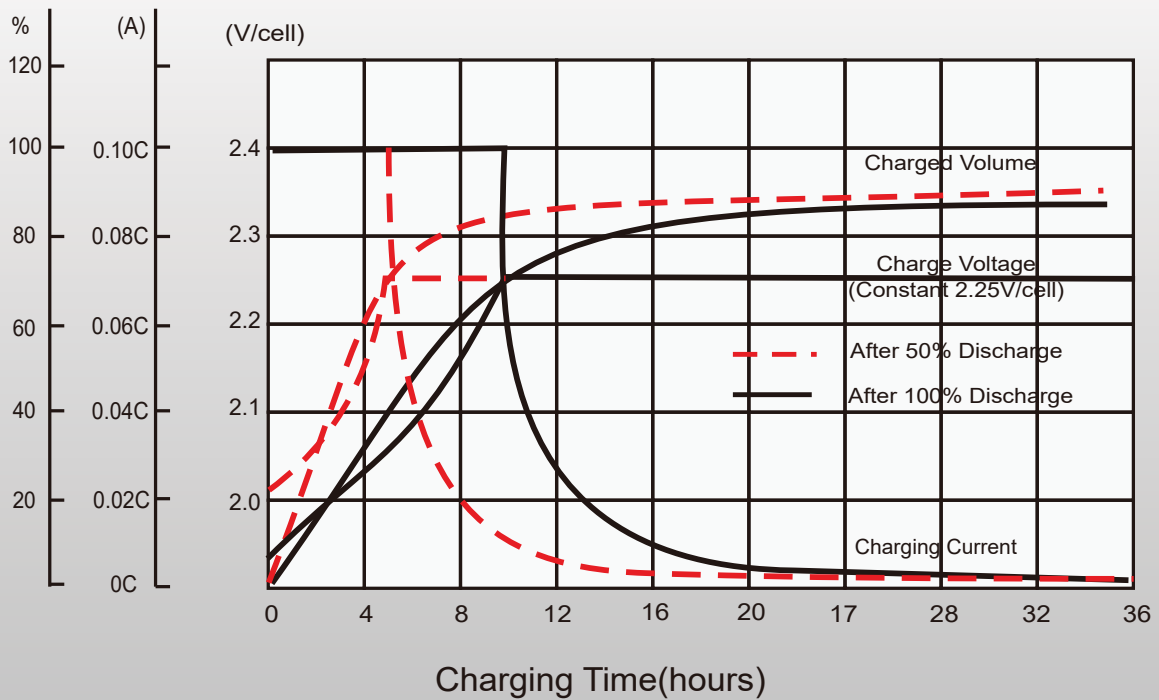
Discharge Characteristics



Float Charging Characteristics

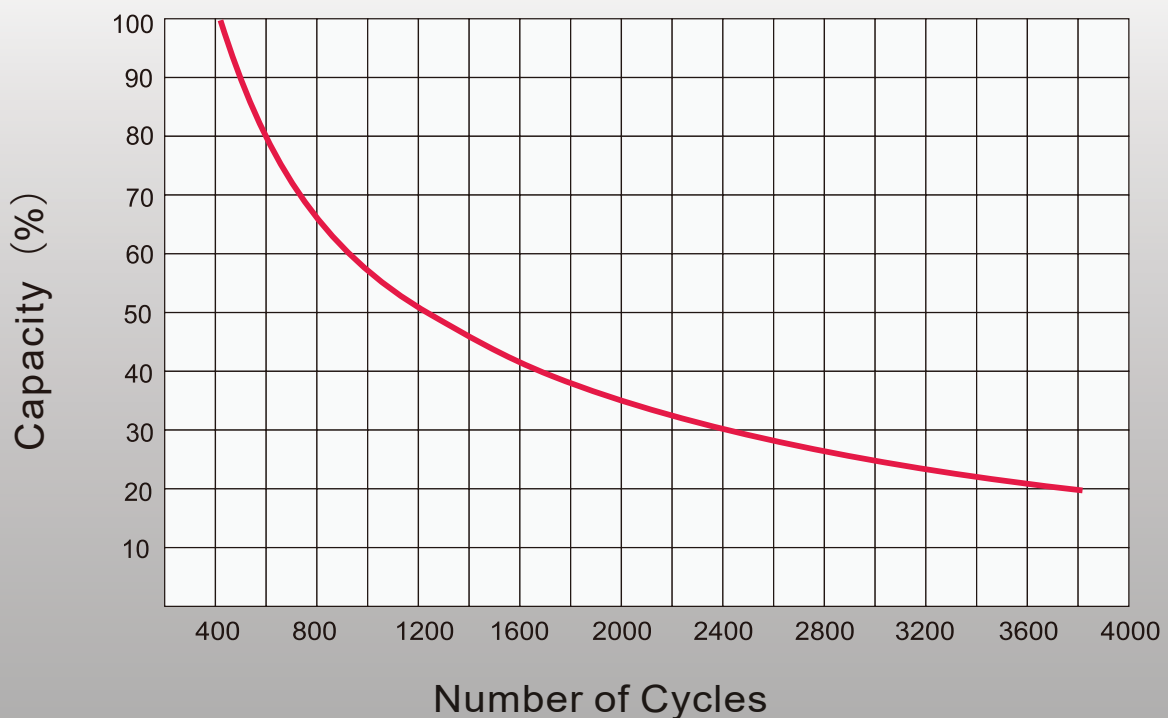
Charge Volume
Charging Current
Charging Voltage

0.1CA-2.25V/cell Temperature: 25°C

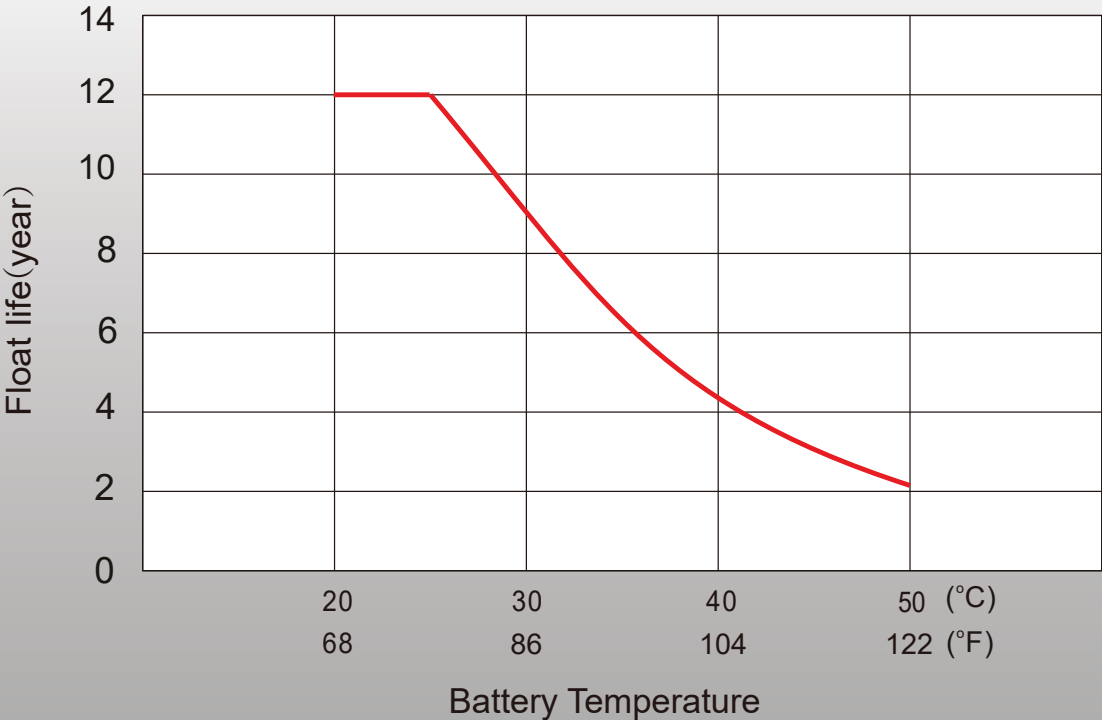


Cycle Life in Relation to Depth of Discharge

Acc.to IEC 896-2 (25 °C / 77 °F)



Effect of Temperature on Long Term Float Life





Starmax Corporation

1585 Cliveden Avenue, Delta, British Columbia
V3M 6M1, Canada

Phone: +1 888 669 1310

Email: info@starmaxbatteries.com

Website: www.starmaxbatteries.com

