

GEL Series Battery

GEL series batteries are designed with AGM separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.

GEL series Batteries are designed for 12 years life time floating design life at 25°C.
Meet with IEC, BS, JIS and Eurobat standard.

Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.
- * Power tools
- * Golf cars and buggies
- * Marine equipment
- * Medical equipment
- * Solar and wind power system



General Features

- * Safety Sealing
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Safety and Quality certification
- * Long Life and low self-discharge design

Construction

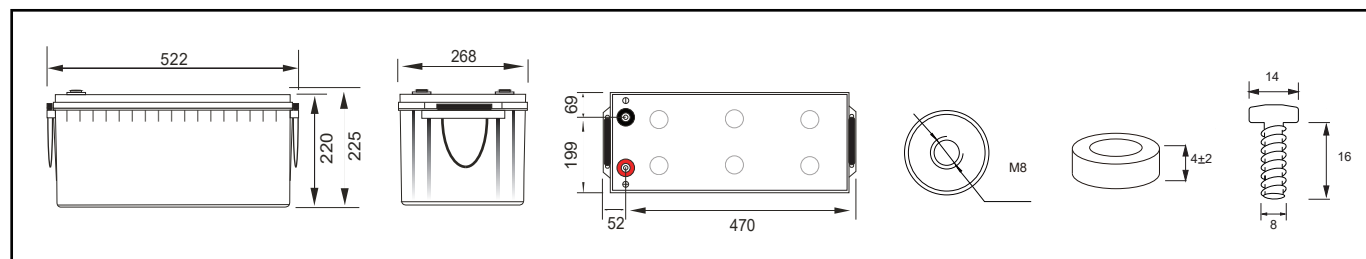
- * Positive Lead dioxide
- * Electrolyte Silicon dioxide
- * Separator AGM
- * Container ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		250Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	522mm (20.55 inches)	268mm (10.55 inches)	220mm (8.66 inches)	225mm (8.85 inches)
Approx Weight	64.2kg(141.53lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(25A,10.5V)	5 hour rate(44.49A,10.5V)	3 hour rate(64.65A,10.8V)	1 hour rate(150A,9.6V)
	250Ah	222.45Ah	193.95Ah	150Ah
Max.discharge current	2000A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 2.5mΩ			
Capacity affected by Temp.(10 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use		Float Use	
	14.40-15.00V (Initial charging current less than 75A)		13.60-13.80V	

Outer dimension (mm)

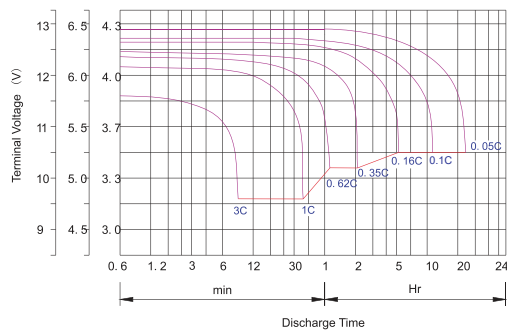
Terminal Type (mm)



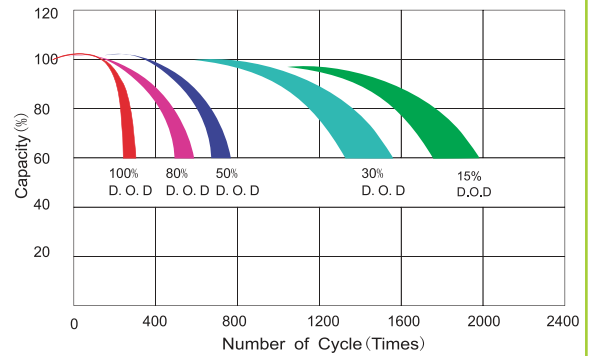
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V/time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	435.000	256.500	150.000	109.783	92.544	65.922	44.988	31.855	25.941	13.967
	839.550	510.948	299.250	219.203	185.165	131.899	90.014	63.736	51.903	27.946
1.67V	412.403	251.019	148.913	108.696	92.083	65.576	44.740	31.586	25.538	13.269
	796.558	500.281	297.101	217.087	184.397	131.444	89.680	63.330	51.203	26.604
1.70V	402.234	248.827	147.826	108.587	91.853	65.410	44.729	31.270	25.216	12.915
	777.518	495.928	295.290	216.957	184.013	131.148	89.682	62.727	50.582	25.907
1.75V	385.286	244.442	145.652	107.174	91.277	65.000	44.493	31.183	25.000	12.710
	745.528	487.544	291.667	214.348	182.827	130.390	89.252	62.599	50.188	25.515
1.80V	369.468	238.962	144.565	106.413	90.700	64.654	44.369	30.914	24.597	12.291
	716.028	476.827	289.855	213.358	181.708	129.761	89.048	62.106	49.415	24.693
1.85V	350.260	232.385	142.391	105.217	89.894	64.078	44.121	30.511	24.194	11.872
	679.504	464.038	285.922	211.487	180.171	128.733	88.638	61.357	48.653	23.875

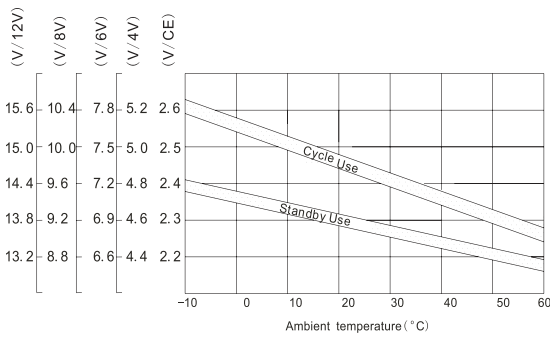
Discharge characteristic Curve



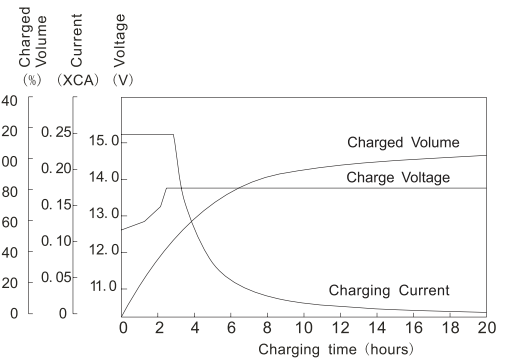
Cycle service life in relation to depth of discharge



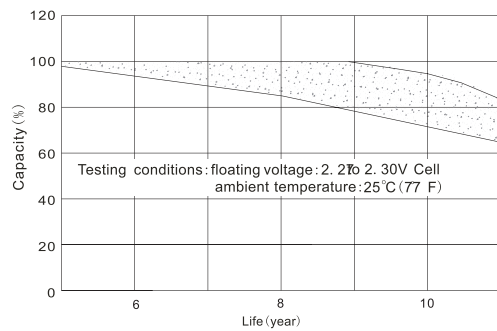
Relationship between charging voltage and temperature



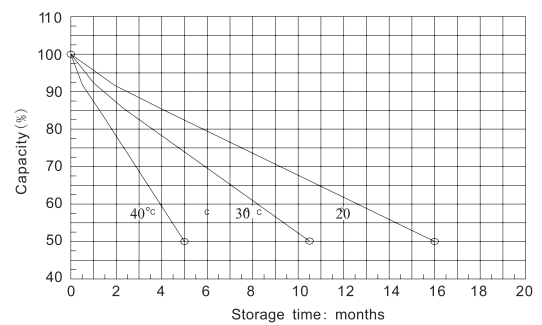
Constant voltage charging characteristic (0.25CA, at 25°C)



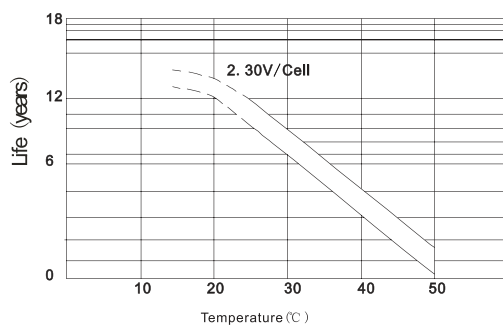
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

