

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

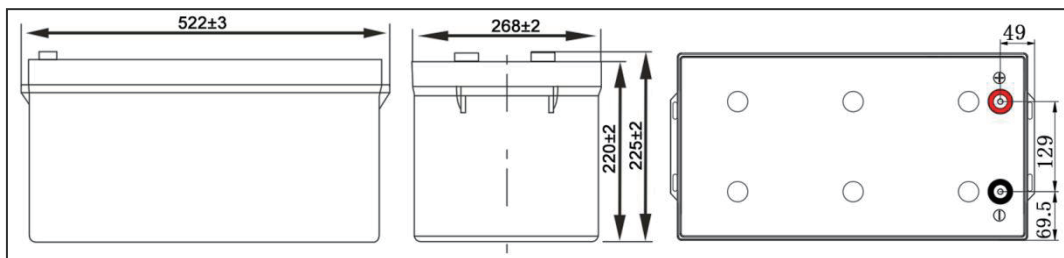
Construction

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

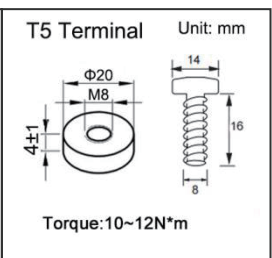
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated Capacity (10 Hours Rate)		250Ah	
Dimension	Length	Width	Height	Total Height
	522mm (20.55 inches)	268mm (10.55 inches)	220mm (8.66 inches)	225mm (8.86 inches)
Approx. Weight	64.5kg			
Internal Resistance	Full charge at 25°C (77°F): Approx. 2.30mΩ			
Max. Charge Current	75A			
Max. Discharge Current	2000A (5Sec.)			
Short-Circuit Current	2920A			
Operating Temperature Range	Normal Operating Temperature	Discharge	Charge	Storage
	25°C (77°F)	-15°C~50°C (5°F~122°F)	-15°C~40°C (5°F~104°F)	-15°C~40°C (5°F~104°F)
Capacity @ 25°C (77°F)	10 hour rate(25A,10.8V)	5 hour rate(43.4A,10.8V)	3 hour rate(66.0A,10.2V)	1 hour rate(158A,9.6V)
	250.0Ah	217Ah	198.0Ah	158.0Ah
Capacity affected by Temp. (10HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Charge Method	Float Charging Voltage		Equalization Charging Voltage	
	13.5 ~ 13.8 VDC/Unit at 25°C (77°F)		14.4~ 15.0 VDC/Unit at 25°C (77°F)	

Outer Dimension (mm)



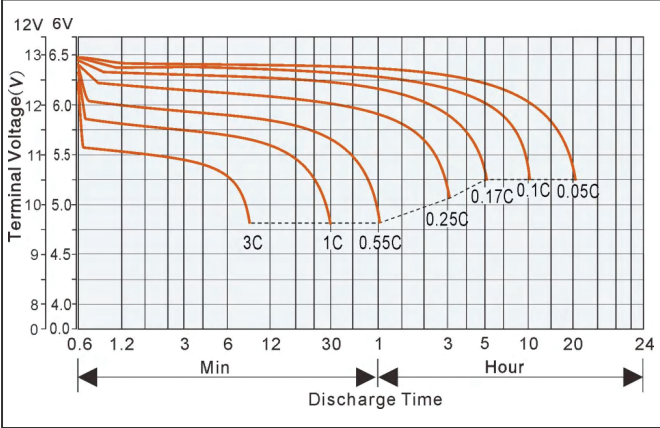
Terminal Type



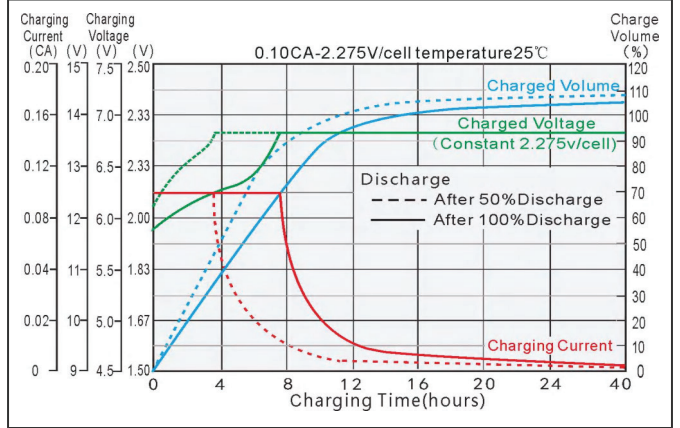
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	400	345	299	263	215	138	83.2	63.4	42.5	29.3	24.6	13.0
	W	750	651	565	498	415	268	161.8	125.5	84.3	57.8	49.3	26.3
1.80V/cell	A	443	382	329	285	230	143	85.8	64.4	43.4	29.9	25.0	13.3
	W	820	715	619	533	439	277	166.2	127.0	85.5	58.7	49.8	26.5
1.75V/cell	A	485	416	357	306	243	148	88.3	65.3	44.2	30.4	25.3	13.4
	W	890	777	665	569	460	285	169.9	128.3	86.5	59.4	50.1	26.7
1.70V/cell	A	525	444	382	325	254	152	90.2	66.0	44.7	30.7	25.5	13.5
	W	950	825	700	599	476	290	173.1	129.7	87.4	59.9	50.3	26.8
1.67V/cell	A	555	465	400	337	260	154	91.7	66.7	45.1	30.9	25.6	13.6
	W	985	854	725	620	486	293	175.2	130.6	88.0	60.2	50.4	26.9
1.60V/cell	A	600	500	424	360	272	158	94.3	68.1	45.7	31.3	25.7	13.6
	W	1050	890	760	655	507	298.0	179.5	132.5	89.1	60.8	50.6	27.0

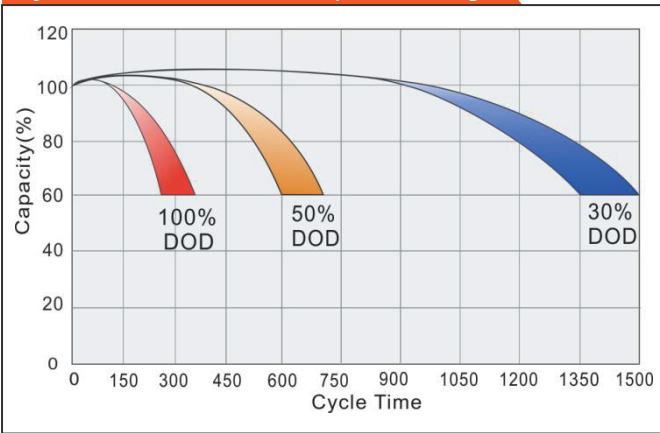
Discharge characteristic curve (25°C/77°F)



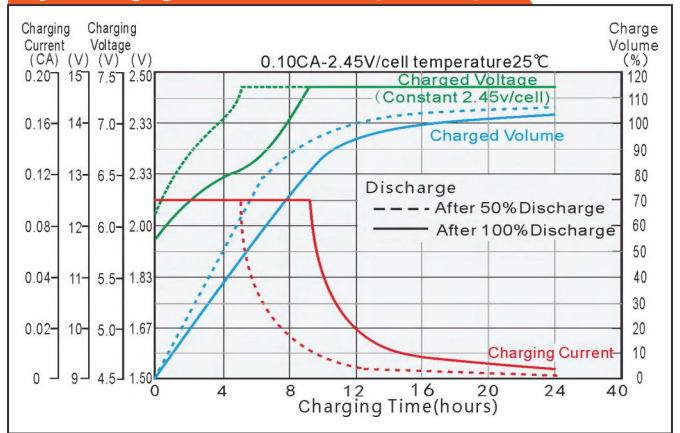
Charging characteristic curve of floating charge (25°C/77°F)



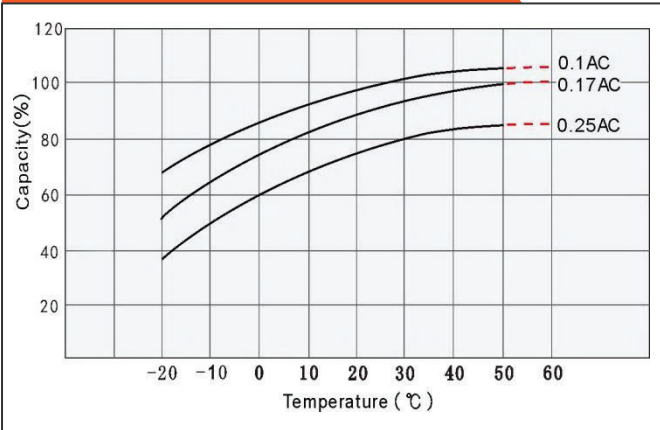
Cycle service life in relation to depth of discharge



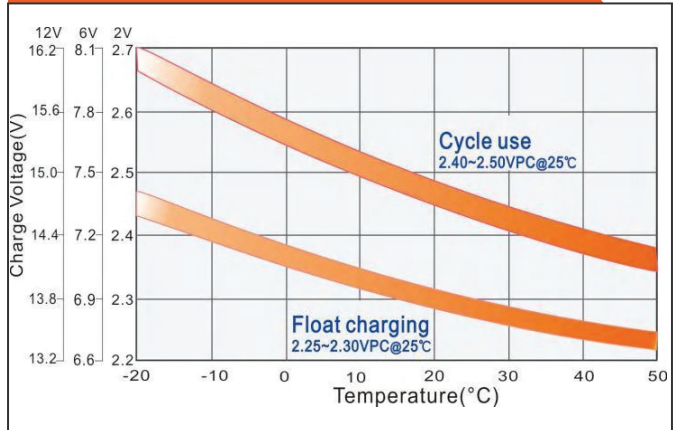
Cyclic charging characteristic curve (25°C/77°F)



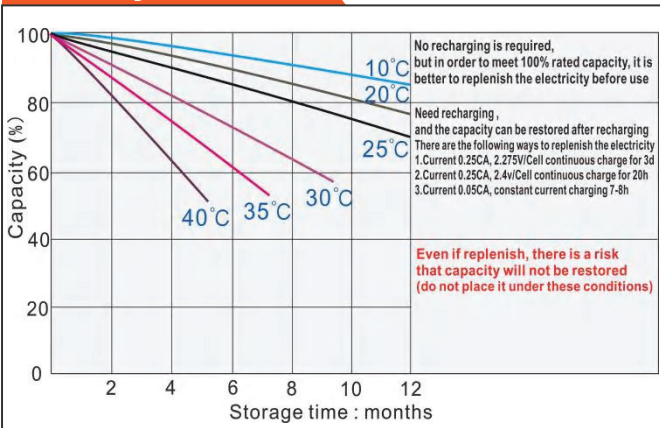
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self Discharge Characteristics



Temperature vs Float Life

