

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

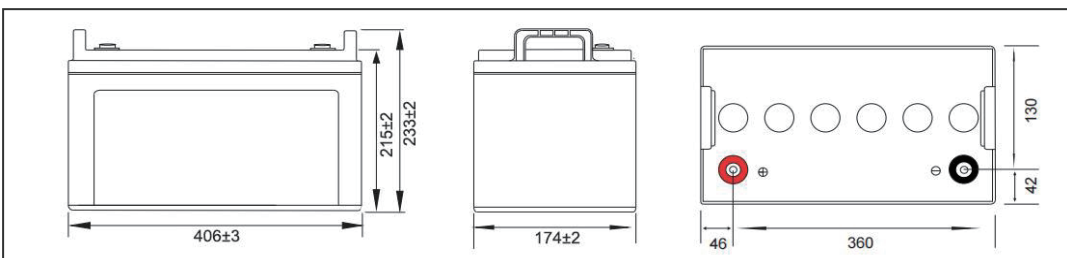
Construction

- 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

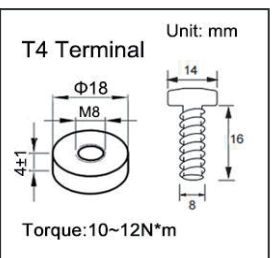
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated Capacity (10 Hours Rate)		120Ah	
Dimension	Length	Width	Height	Total Height
	406mm (15.98 inches)	174mm (6.85 inches)	215mm (8.46 inches)	233mm (9.17 inches)
Approx. Weight	32.76kg			
Internal Resistance	Full charge at 25°C (77°F): Approx. 3.35mΩ			
Max. Charge Current	36A			
Max. Discharge Current	1200A (5sec.)			
Short-Circuit Current	1990A			
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(12.0A,10.8V)	5 hour rate(21.15A,10.8V)	3 hour rate(31.7A,10.2V)	1 hour rate(77.5A,9.6V)
	120.0Ah	105.75Ah	95.1Ah	77.5Ah
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)



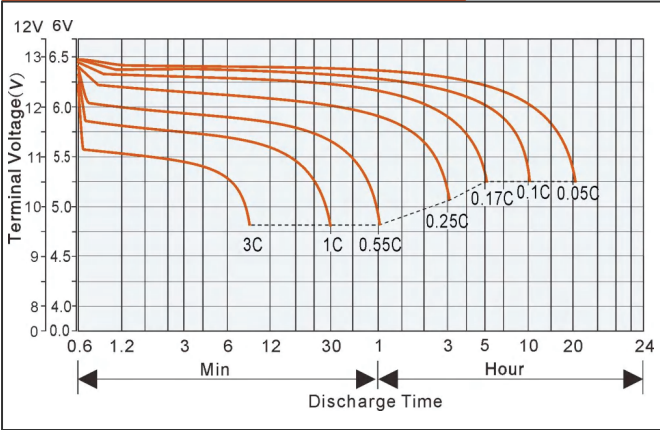
Terminal Type



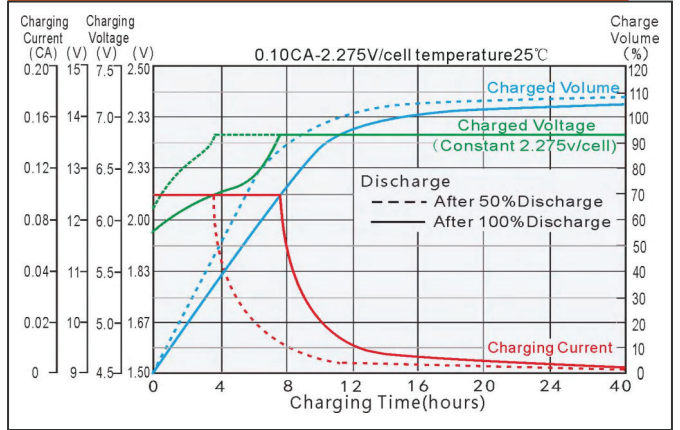
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	262	206	173	148	114	70.8	42.0	29.00	20.50	13.80	11.85	6.25
	W	500	395	333	287	221	138.6	82.8	57.34	40.94	27.67	23.84	12.66
1.80V/cell	A	295	223	184	156	120	72.5	43.1	29.95	21.15	13.98	12.00	6.35
	W	559	424	351	301	231	141.0	84.4	58.94	42.04	27.90	24.06	12.80
1.75V/cell	A	326	239	194	164	125	74.1	44.1	30.85	21.77	14.15	12.14	6.44
	W	611	451	367	313	239	142.9	85.8	60.34	43.05	28.10	24.25	12.91
1.70V/cell	A	356	254	203	170	129	75.6	45.1	31.70	22.37	14.31	12.27	6.52
	W	656	473	380	322	245	144.4	86.9	61.47	43.96	28.29	24.35	13.03
1.67V/cell	A	373	263	208	174	131	76.3	45.5	32.09	22.65	14.38	12.31	6.54
	W	686	487	385	326	246	145.3	87.4	62.03	44.42	28.34	24.40	13.05
1.60V/cell	A	410	282	220	181	135	77.5	46.2	32.50	23.00	14.50	12.38	6.58
	W	724	507	398	333	250	146.8	88.7	62.51	45.03	28.50	24.48	13.09

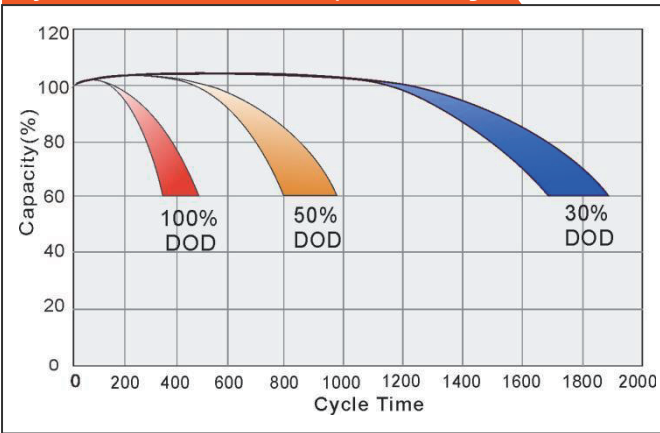
Discharge characteristic curve (25°C/77°F)



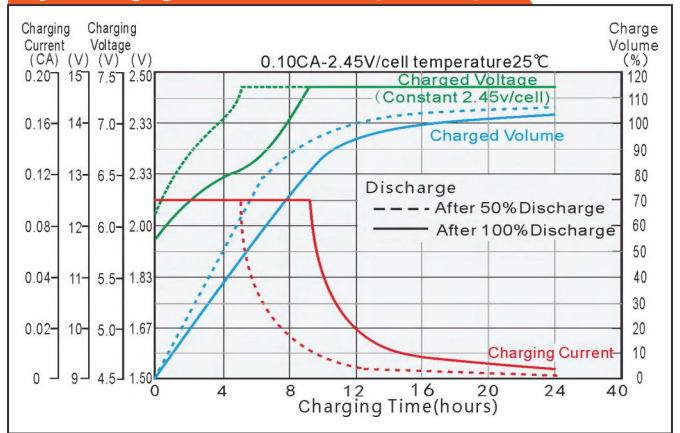
Charging characteristic curve of floating charge (25°C/77°F)



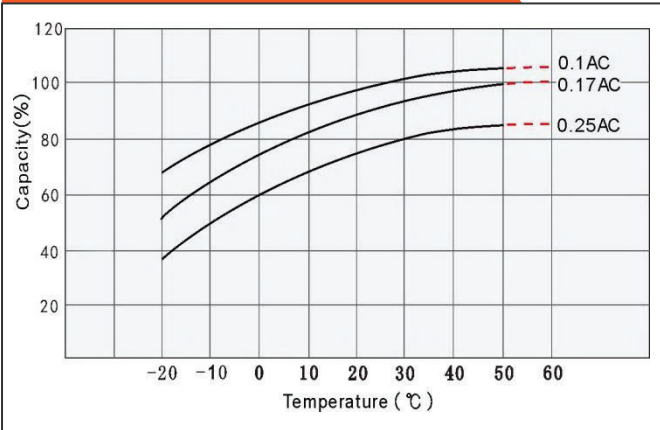
Cycle service life in relation to depth of discharge



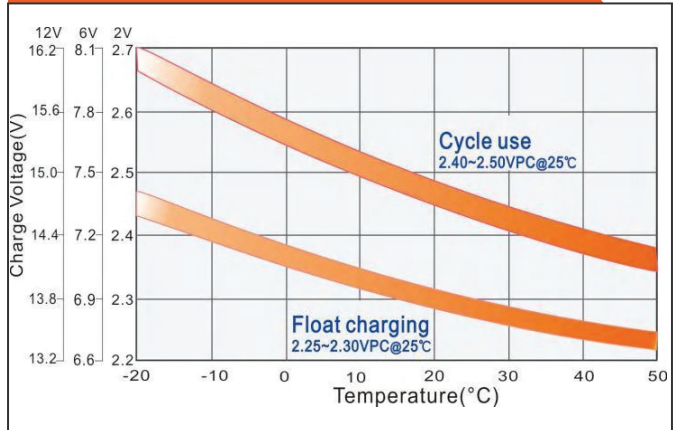
Cyclic charging characteristic curve (25°C/77°F)



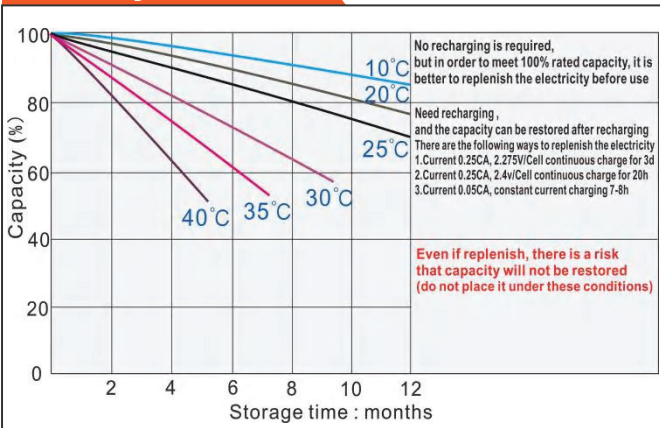
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self Discharge Characteristics



Temperature vs Float Life

