

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

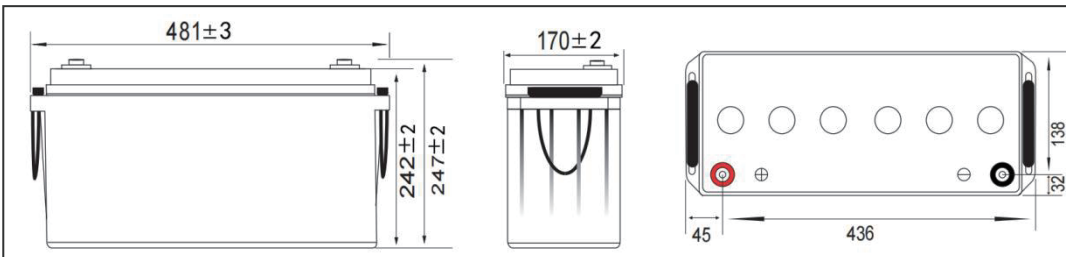
Construction

- 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

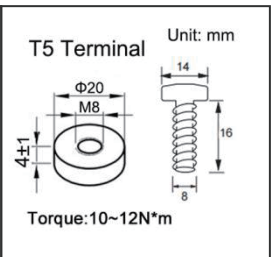
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated Capacity (10 Hours Rate)		150Ah	
Dimension	Length	Width	Height	Total Height
	481mm (18.93 inches)	170mm (6.69 inches)	242mm (9.52 inches)	247mm (9.72 inches)
Approx. Weight	40.55kg			
Internal Resistance	Full charge at 25°C (77°F): Approx. 3.40mΩ			
Max. Charge Current	60A			
Max. Discharge Current	1200A (5sec.)			
Short-Circuit Current	2000A			
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(15.0A,10.8V)	5 hour rate(25.9A,10.8V)	3 hour rate(40.0A,10.2V)	1 hour rate(97.4A,9.6V)
	150.0Ah	129.5Ah	120.0Ah	97.4Ah
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)



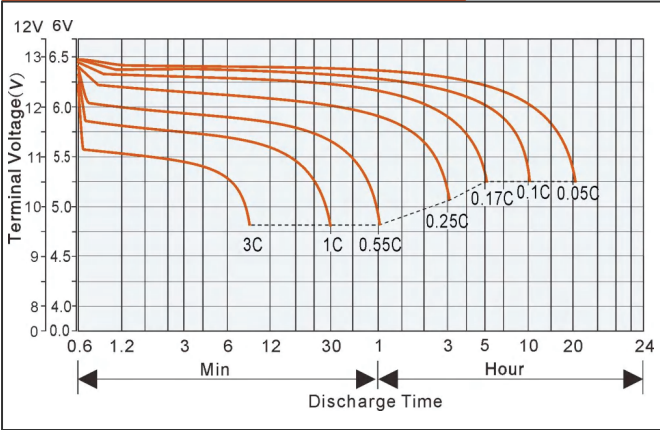
Terminal Type



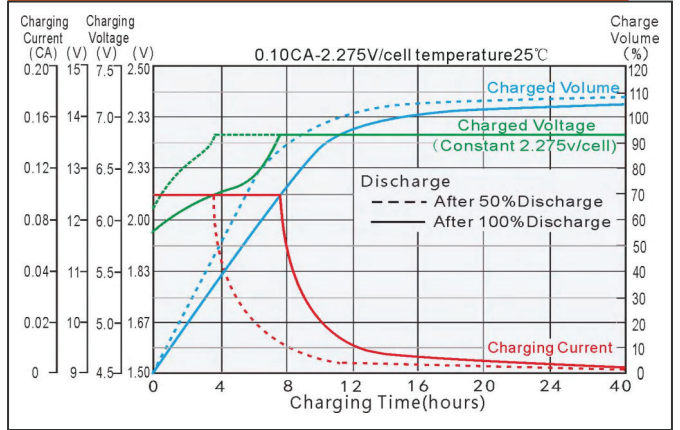
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	300	245	199	176	143	86.3	49.9	37.9	25.5	17.2	14.7	7.73
	W	565	463	380	337	275	166.6	97.5	74.9	50.4	34.2	29.1	15.69
1.80V/cell	A	330	268	214	186	150	89.2	51.6	38.7	25.9	17.5	15.0	7.86
	W	615	500	404	352	287	172.8	100.2	76.1	51.1	34.6	29.4	15.78
1.75V/cell	A	360	289	227	195	156	91.8	52.8	39.5	26.2	17.7	15.2	7.95
	W	660	535	425	366	297	177.4	102.3	77.2	51.6	35.0	29.7	15.88
1.70V/cell	A	390	310	238	203	163	93.9	53.7	40.0	26.6	17.9	15.4	8.02
	W	695	565	443	380	305	179.7	103.3	77.8	52.1	35.3	30.0	15.94
1.67V/cell	A	400	318	245	209	166	95.2	54.2	40.4	26.9	18.1	15.5	8.06
	W	708	575	450	387	308	181.5	103.9	78.6	52.4	35.6	30.2	16.02
1.60V/cell	A	425	335	260	218	171	97.4	55.1	41.0	27.3	18.4	15.6	8.15
	W	745	595	470	400	315	182.8	105.1	79.5	53.0	36.0	30.5	16.11

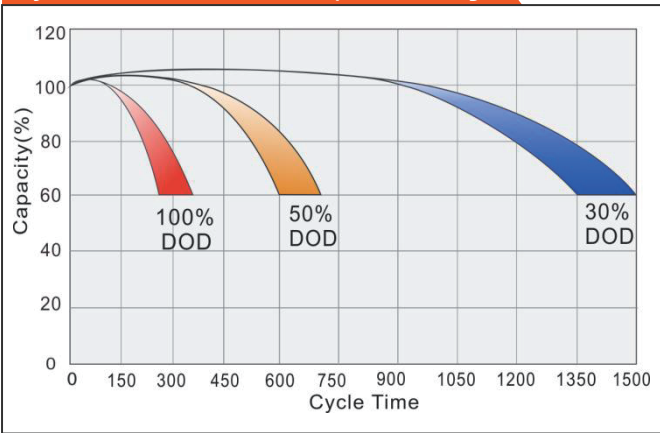
Discharge characteristic curve (25°C/77°F)



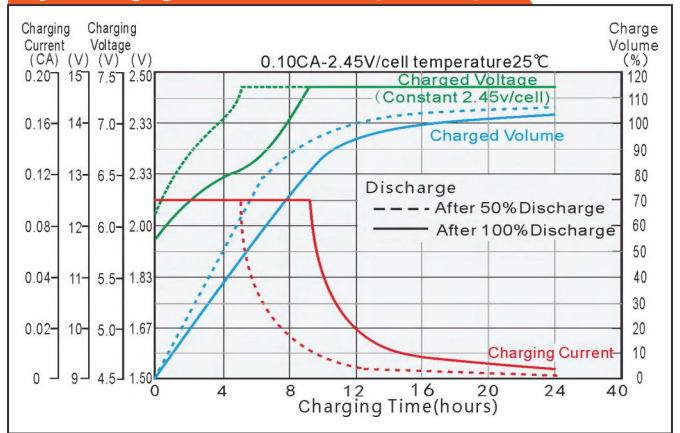
Charging characteristic curve of floating charge (25°C/77°F)



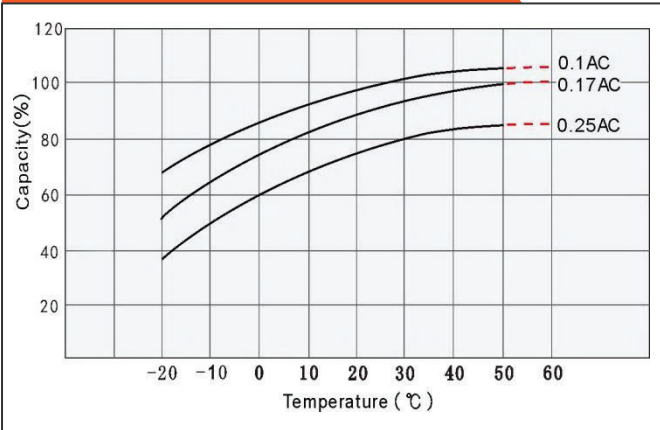
Cycle service life in relation to depth of discharge



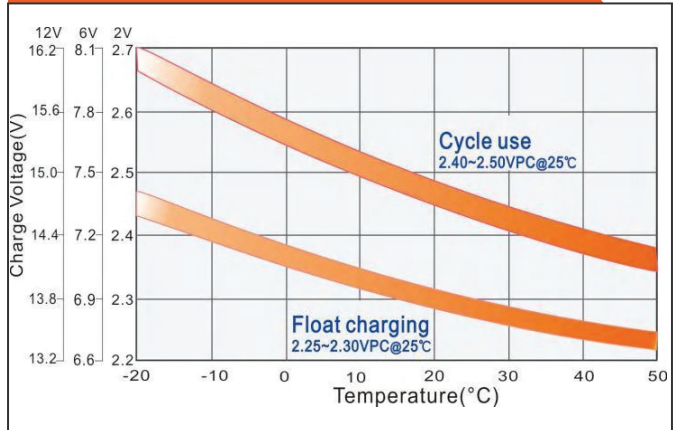
Cyclic charging characteristic curve (25°C/77°F)



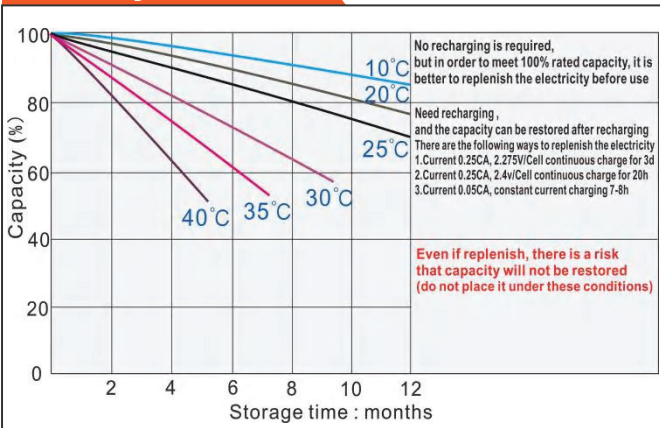
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self Discharge Characteristics



Temperature vs Float Life

