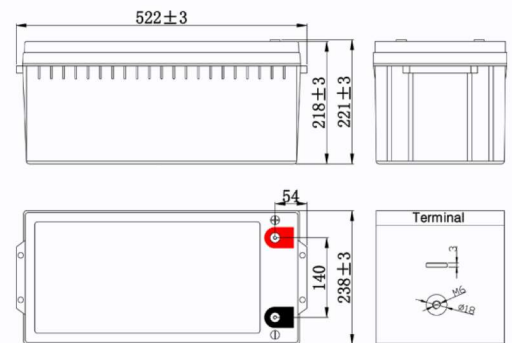


SPECIFICATION

Nominal Voltage	12V (6 cells in series)	
Rated Capacity	180.0Ah	(C ₁₀ , 1.80V/cell)
Dimensions(mm)	Length	522±3 mm
	Width	238±3 mm
	Height	218±3 mm
	Total Height	221±3 mm
Nominal Capacity @25°C (Ah)	20 Hour rate (9.810A to 10.8 volts)	196.2Ah
	10 Hour rate (18.36A to 10.8 volts)	183.6Ah
	5 Hour rate (31.50A to 10.8 volts)	157.5Ah
	1 Hour rate (113.9A to 10.5 volts)	113.9Ah
Approx. Weight	55 kg	
Terminal	T13	
Max.Discharge Current	1440A @25°C (5s)	
Internal Resistance	3.5mΩ @25°C (Full Charged Battery)	
DOD 80%	≥500 Cycles @25°C	
Ambient Temperature	Charge: -20°C~50°C	
	Discharge: -40°C~60°C	
	Storage: -20°C~60°C	
Container Material	A.B.S, UL94-HB, UL94-V0, Optional	
Self Discharge	Deep Cycle Gel Battery can be stored for more than 6 months at 25°C. Self-Discharge ratio less than 3% per month at 25°C. Please charge batteries before using.	



COMPANY CERTIFICATION



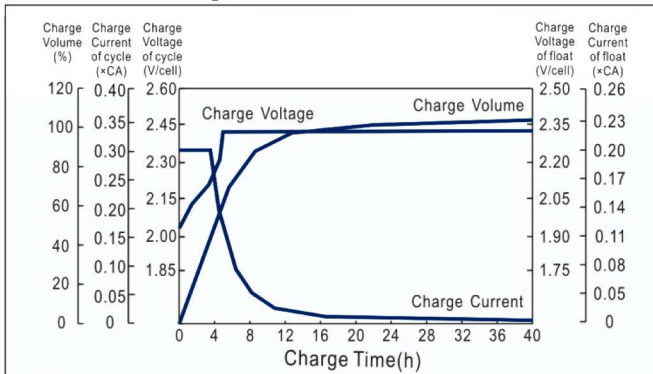
CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A). (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	612.0	407.7	326.5	202.5	117.0	69.93	49.68	33.26	22.36	19.08	10.44
1.70V/cell	549.0	375.3	310.5	197.1	115.4	69.03	48.78	32.47	22.00	18.81	10.17
1.75V/cell	495.0	346.5	296.1	191.7	113.9	68.13	48.24	31.99	21.78	18.63	9.990
1.80V/cell	441.0	315.9	278.1	184.3	111.6	67.19	47.70	31.50	21.46	18.36	9.810

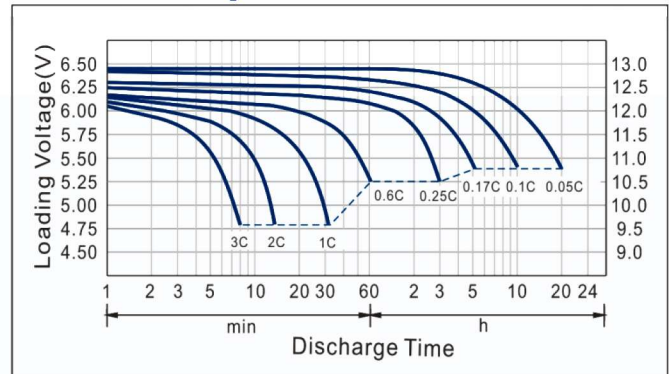
CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT). (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	1055.7	727.1	593.2	378.0	224.3	136.4	98.53	66.14	44.49	38.00	20.86
1.70V/cell	969.9	681.8	571.8	371.2	222.1	135.2	96.99	64.73	43.88	37.56	20.34
1.75V/cell	886.9	638.1	550.3	364.2	220.3	134.0	96.16	63.92	43.56	37.26	19.98
1.80V/cell	801.2	589.7	521.4	353.3	216.7	133.3	95.32	63.00	42.91	36.72	19.62

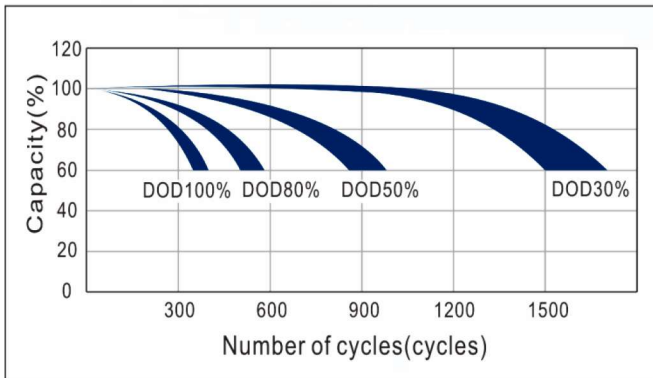
Charge Characteristics Curve



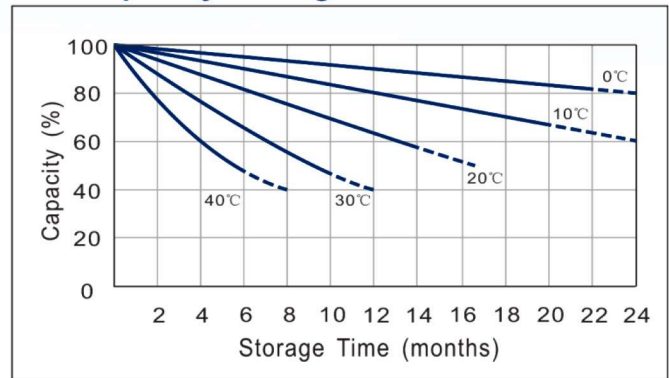
Discharge Characteristics Curve



Cycle service life in relation to depth of discharge



Capacity Storage Characteristics



CAPACITY FACTORS WITH DIFFERENT TEMPERATURE

Battery type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V & 12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V & 12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

MAINTENANCE & CAUTIONS

☑ Charging Procedure:

Application	Charging method	Charge voltage at 25°C	Temperature compensation coefficient of charging voltage	Max. charging current	Temperature
For standby power source	Constant voltage charging (With current restriction)	2.25~2.30 V/cell	-3mV/°C/cell	0.2CA	-20~50°C
For cycle service		2.40~2.45 V/cell	-4mV/°C/cell	0.3CA	

☑ Float service:

Every month, recommend inspection every battery voltage.

Every three months, recommend equalization charge for one time. Equalization charge method: Step 1: Discharge: 100% rate capacity discharge. Step 2: Charge: Max. Current 0.3CA, constant voltage 2.40-2.45V/Cell charge 24h.

☑ Cycle service:

Avoid battery over discharge, especially battery series connection use.

Charged with recommend voltage, ensure battery can be full recharged.

In general, recharge capacity should be 1.1~1.15 times discharge capacity.

☑ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, Ambient temperature and charging voltage.

☑ Charge the batteries at least once every six months, if they are stored at 25°C. Charging Method:

Constant Voltage : $-0.2C \times 2h + 2.40 \sim 2.45V/cell \times 24h$, Max. Current 0.25CA

Constant Current : $-0.2C \times 2h + 0.1C \times 12h$

Fast : $-0.2C \times 2h + 0.3C \times 4h$

☑ Terminal of torque:

	Bolt	M5	M6	M8
Terminal		T3, T10	T4, T7, T11, T12, T13	T5, T6, T8, T9, T14
Torque		6~7N.m	8~10N.m	10~12N.m

Note: The manufacturer reserves the right to change and modify the design and specifications without prior notice