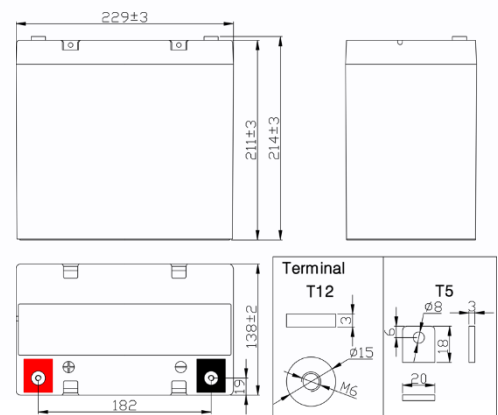


SPECIFICATION

Nominal Voltage	12V (6 cells in series)	
Rated Capacity	53.0Ah	(C ₁₀ , 1.80V/cell)
Dimensions(mm)	Length	229±3 mm
	Width	138±2 mm
	Height	211±3 mm
	Total Height (T12)	214±3 mm
	Total Height (T5)	229±3 mm
Nominal Capacity @25°C (Ah)	20 Hour rate (2.841A to 10.8 volts)	56.8Ah
	10 Hour rate (5.353A to 10.8 volts)	53.5Ah
	5 Hour rate (9.164A to 10.8 volts)	45.8Ah
	1 Hour rate (33.55A to 10.5 volts)	33.5Ah
Approx. Weight	16 kg	
Terminal	T12/T5	
Max.Discharge Current	440A @25°C (5s)	
Internal Resistance	8.0mΩ @25°C (Full Charged Battery)	
Floating Design Life	10 years @25°C	
Ambient Temperature	Charge:	-15°C~50°C
	Discharge:	-20°C~60°C
	Storage:	-20°C~50°C
Container Material	A.B.S, UL94-HB, UL94-V0, Optional	



Self Discharge	VRLA batteries 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.
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COMPANY CERTIFICATION



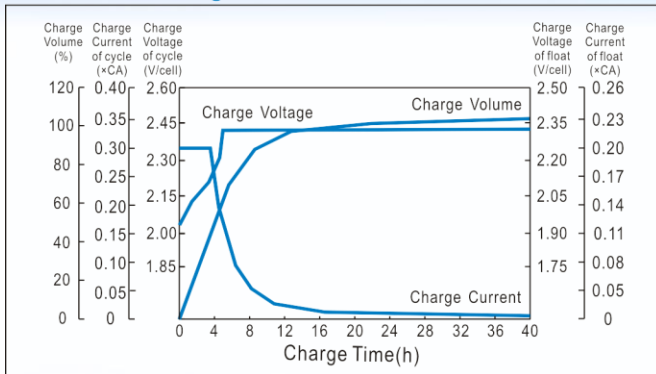
CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	177.6	114.0	92.75	59.63	34.45	20.59	14.25	9.556	6.583	5.565	3.053
1.70V/cell	156.4	103.4	88.78	58.04	33.97	20.33	14.07	9.445	6.477	5.459	2.947
1.75V/cell	140.5	95.40	84.01	56.45	33.55	20.06	13.91	9.302	6.413	5.406	2.894
1.80V/cell	121.9	86.39	78.71	54.27	32.86	19.78	13.65	9.164	6.318	5.353	2.841

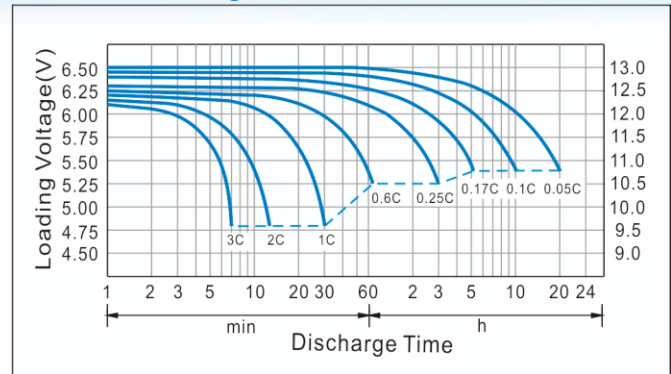
CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	306.3	203.2	168.5	111.3	66.03	40.15	28.26	19.00	13.10	11.08	6.101
1.70V/cell	276.2	187.8	163.5	109.3	65.40	39.80	27.98	18.83	12.92	10.90	5.894
1.75V/cell	251.6	175.7	156.1	107.2	64.86	39.45	27.73	18.59	12.83	10.81	5.788
1.80V/cell	221.5	161.3	147.6	104.0	63.80	39.24	27.27	18.33	12.64	10.71	5.682

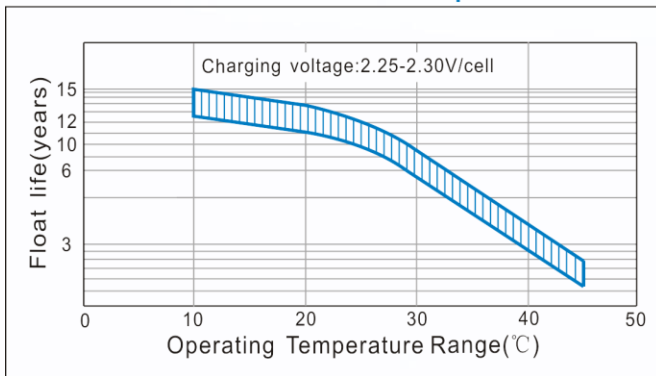
Charge Characteristics Curve



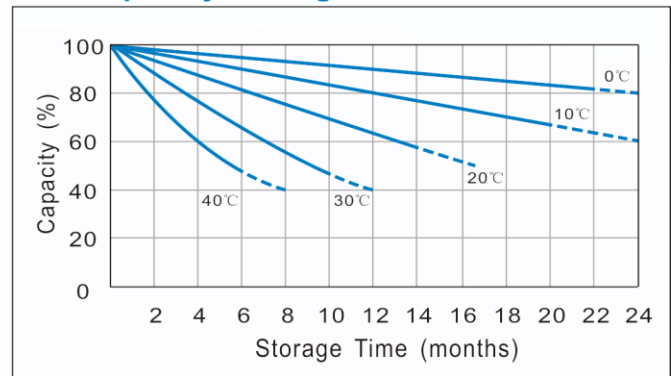
Discharge Characteristics Curve



Float Service Life VS Temperature



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	-15~50°C
For cycle service		2.40-2.45 V/cell	-4mV/°C/cell	0.3CA	

- ☑ 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.
- ☑ 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: -0.2Cx2h+2.40~2.45V/cellx24h, Max. Current 0.25CA
 Constant Current: -0.2Cx2h+0.1Cx12h
 Fast: -0.2Cx2h+0.3Cx4h

- ☑ 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

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