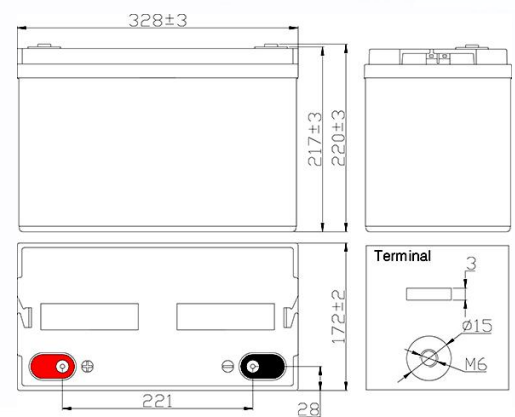


SPECIFICATION

Nominal Voltage	12V (6 cells in series)	
Rated Capacity	100.0Ah	(C ₁₀ , 1.80V/cell)
Dimensions(mm)	Length	328±3 mm
	Width	172±2 mm
	Height	217±3 mm
	Total Height	220±3 mm
Nominal Capacity @25°C (Ah)	20 Hour rate (5.360A to 10.8 volts)	107.2Ah
	10 Hour rate (10.10A to 10.8 volts)	101.0Ah
	5 Hour rate (17.29A to 10.8 volts)	86.4Ah
	1 Hour rate (63.30A to 10.5 volts)	63.3Ah
Approx. Weight	28.0 kg	
Terminal	T12	
Max.Discharge Current	800A @25°C (5s)	
Internal Resistance	5.0mΩ @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.	



COMPANY CERTIFICATION



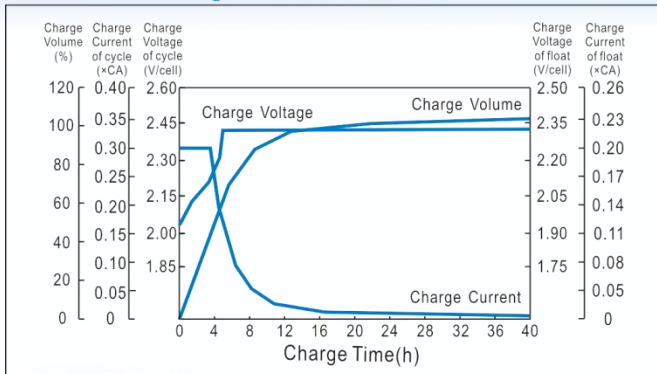
CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	335.0	215.0	175.0	112.5	65.00	38.85	26.88	18.03	12.42	10.50	5.760
1.70V/cell	295.0	195.0	167.5	109.5	64.10	38.35	26.55	17.82	12.22	10.30	5.560
1.75V/cell	265.0	180.0	158.5	106.5	63.30	37.85	26.25	17.55	12.10	10.20	5.460
1.80V/cell	230.0	163.0	148.5	102.4	62.00	37.33	25.75	17.29	11.92	10.10	5.360

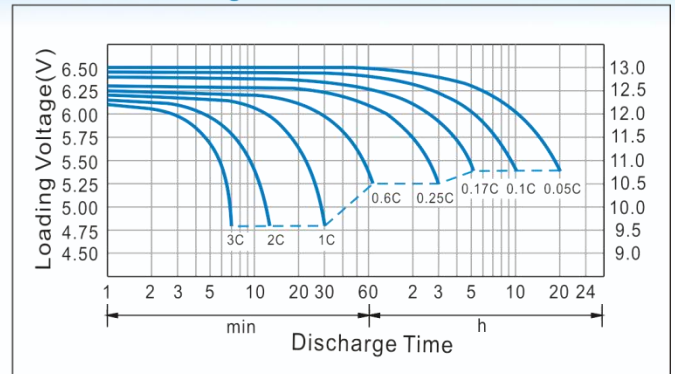
CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25°C)

F.V/Time	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	577.9	383.4	317.9	210.0	124.6	75.76	53.31	35.85	24.72	20.91	11.51
1.70V/cell	521.2	354.3	308.5	206.2	123.4	75.10	52.79	35.52	24.38	20.57	11.12
1.75V/cell	474.8	331.5	294.5	202.4	122.4	74.44	52.33	35.07	24.20	20.40	10.92
1.80V/cell	417.8	304.3	278.4	196.3	120.4	74.04	51.46	34.58	23.84	20.20	10.72

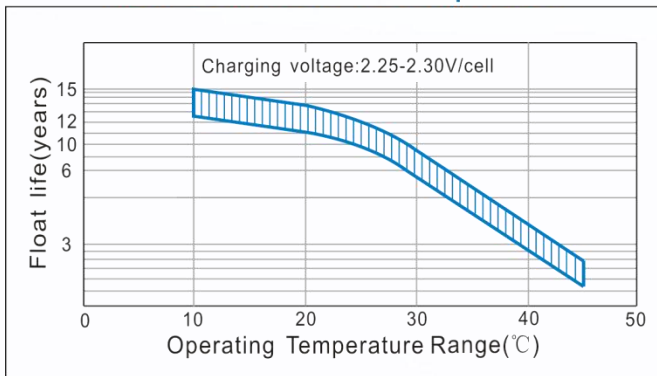
Charge Characteristics Curve



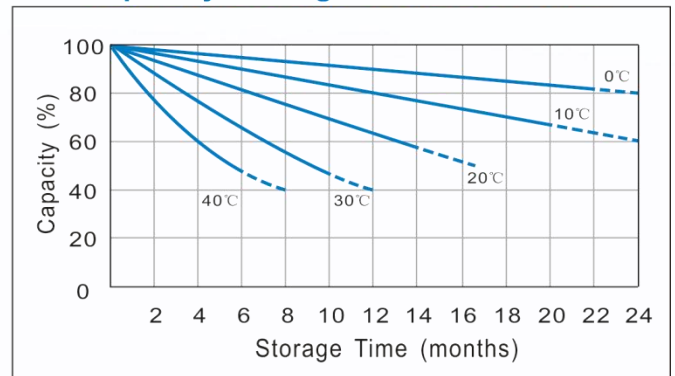
Discharge Characteristics Curve



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: -0.2C×2h+2.40~2.45V/cell×24h, Max. Current 0.25CA
 Constant Current: -0.2C×2h+0.1C×12h
 Fast: -0.2C×2h+0.3C×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

SHENZHEN POWER KINGDOM CO., LTD.

Baigongao Industrial Zone, Xikeng New Village, Fumin, Guanlan Town, Shenzhen Guangdong, China
 Website: www.powerkingdom.com.cn Email: sales@powerkingdom.com.cn Tel: +86 755 22161920 / 22161923

Edition Jan 2023