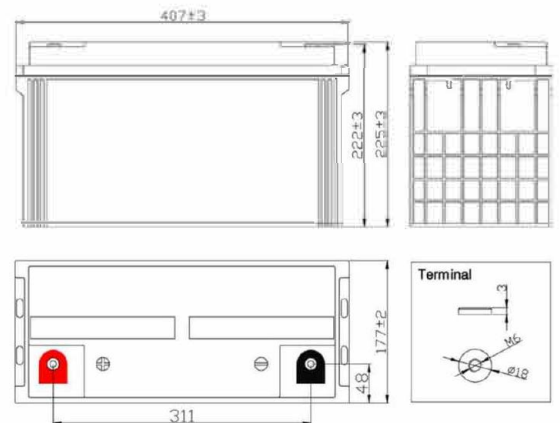


## Specification

Nominal Voltage (V)	12V (6 cells in series)	
Rated Capacity	110.0Ah	(C <sub>20</sub> , 1.80V/cell)
Dimensions(mm)	Length	407 ± 3 mm
	Width	177 ± 2 mm
	Height	225 ± 3 mm
	Total Height	225 ± 3 mm
Nominal Capacity @25°C (Ah)	20 Hour rate (5.500A to 10.8 volts)	110.0Ah
	10 Hour rate (10.00A to 10.8 volts)	100.0Ah
	5 Hour rate (17.29A to 10.8 volts)	86.4Ah
	1 Hour rate (63.30A to 10.5 volts)	63.3Ah
Approx. Weight	33.5 kg	
Terminal	T13	
Max.Discharge Current	800A @25°C (5s)	
Internal Resistance	10.5mΩ @25°C (Full Charged Battery)	
DOD 80%	≥700 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	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.	



## Certification



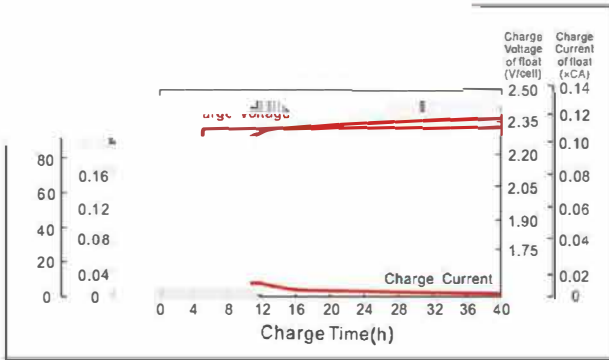
## Constant Current Discharge Characteristics (A), (25°C)

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	10.40	5.698
1.70V/cell	295.0	195.0	167.5	109.5	64.10	38.35	26.55	17.82	12.22	10.20	5.656
1.75V/cell	265.0	180.0	158.5	106.5	63.30	37.85	26.25	17.55	12.10	10.10	5.602
1.80V/cell	230.0	163.0	148.5	102.4	62.00	37.33	25.75	17.29	11.92	10.00	5.500

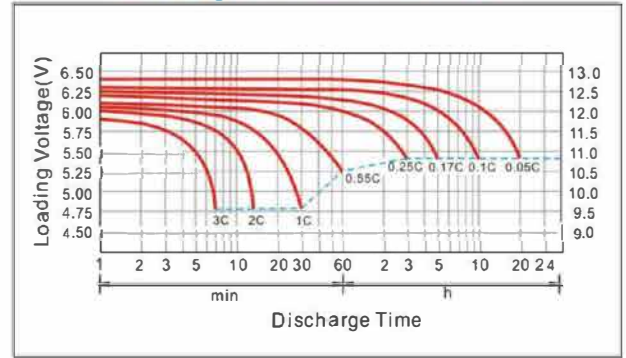
## Constant Wattage Discharge Characteristics (Watt), (25°C)

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	20.71	11.39
1.70V/cell	521.2	354.3	308.5	206.2	123.4	75.10	52.79	35.52	24.38	20.37	11.31
1.75V/cell	474.8	331.5	294.5	202.4	122.4	74.44	52.33	35.07	24.20	20.20	11.20
1.80V/cell	417.8	304.3	278.4	196.3	120.4	74.04	51.46	34.58	23.84	20.00	11.00

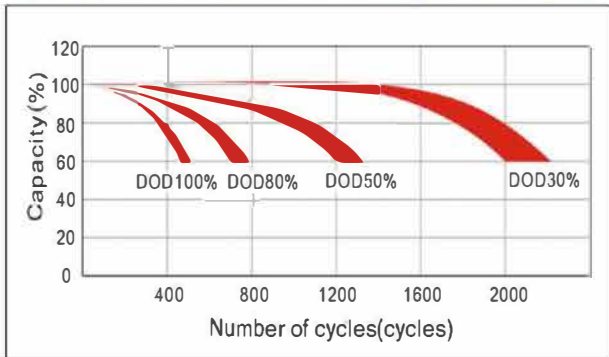
# PG100-12 (12V110Ah)



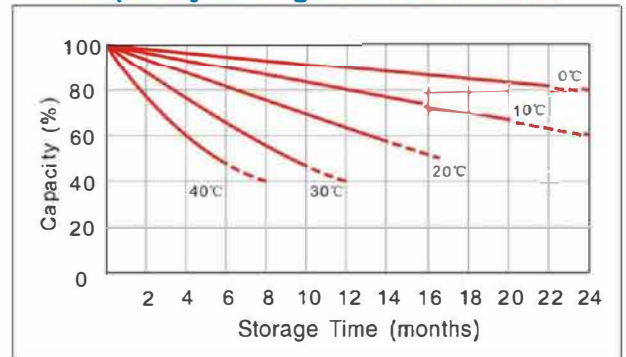
## Discharge Characteristics Curve



## 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		2.35-2.40 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 :  $-0.2C \times 2h + 2.4-2.45V/cell \times 24h$ , 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