

Specification

Nominal Voltage (V)	24V (12 cells in series)	
Rated Capacity	18Ah	(C ₂₀ , 1.75V/cell)
Dimensions(mm)	Length	170 ± 2 mm
	Width	146 ± 1.5 mm
	Height	184.5 ± 2 mm
	Total Height	184.5 ± 2 mm
Nominal Capacity @25°C (Ah)	20 Hour rate (0.909A to 21.0 volts)	18.1Ah
	10 Hour rate (1.737A to 21.0 volts)	17.3Ah
	5 Hour rate (3.105A to 21.0 volts)	15.5Ah
	1 Hour rate (11.70A to 19.2 volts)	11.7Ah
	15 min rate (34.65A to 19.2 volts)	8.66Ah
Approx. Weight	11 kg	
Terminal	Special	
Max.Discharge Current	270A @25°C (5s)	
Internal Resistance	38mΩ @25°C (Full Charged Battery)	
Floating Design Life	5 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.	



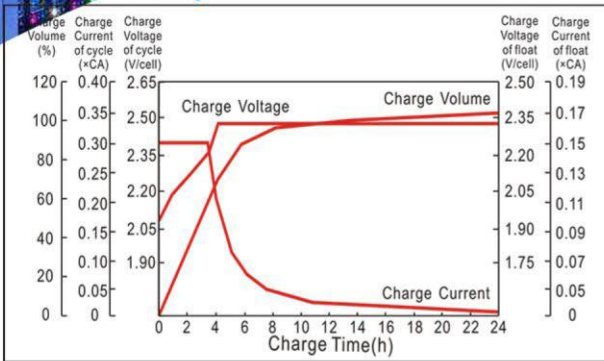
Constant Current Discharge Characteristics (A), (25°C)

F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	71.01	46.53	34.65	18.45	11.70	6.592	4.707	3.175	2.102	1.800	0.963
1.70V/cell	64.44	43.11	32.67	17.91	11.44	6.489	4.590	3.128	2.070	1.755	0.929
1.75V/cell	57.87	40.41	30.87	17.37	11.30	6.435	4.545	3.105	2.052	1.737	0.909
1.80V/cell	51.93	37.80	29.07	16.83	11.13	6.381	4.491	3.069	2.025	1.710	0.873

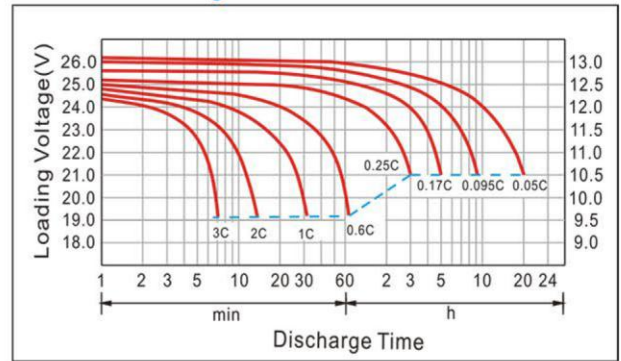
Constant Wattage Discharge Characteristics (Watt), (25°C)

F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	128.4	84.92	63.81	35.21	23.21	13.07	9.383	6.335	4.194	3.594	1.926
1.70V/cell	118.7	80.11	61.26	34.48	22.78	12.92	9.165	6.246	4.133	3.510	1.861
1.75V/cell	108.0	76.44	58.40	33.73	22.51	12.83	9.082	6.205	4.101	3.477	1.826
1.80V/cell	97.80	72.14	55.48	32.96	22.21	12.73	8.982	6.138	4.050	3.423	1.753

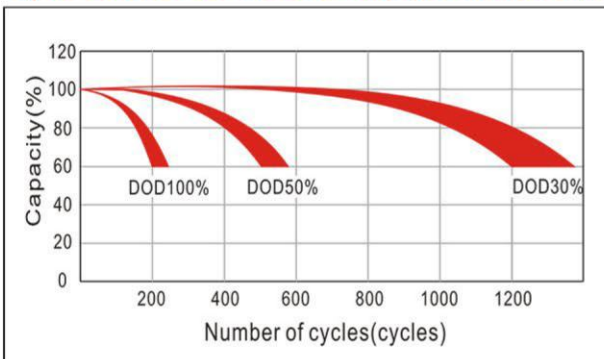
Charge Characteristics Curve



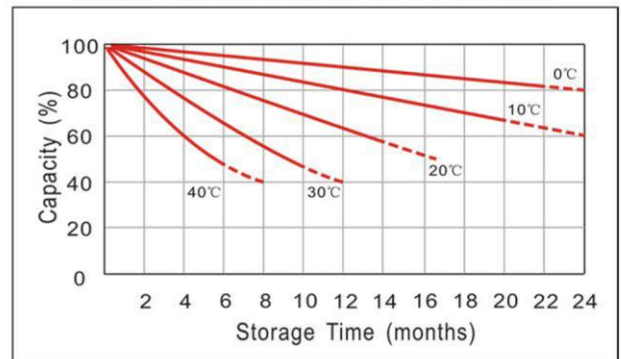
Discharge Characteristics Curve



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&24V	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&24V	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		2.45~2.50 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 2.45~2.50V/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 : $-0.2C \times 2h + 2.4 \sim 2.45V/cell \times 24h$, 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