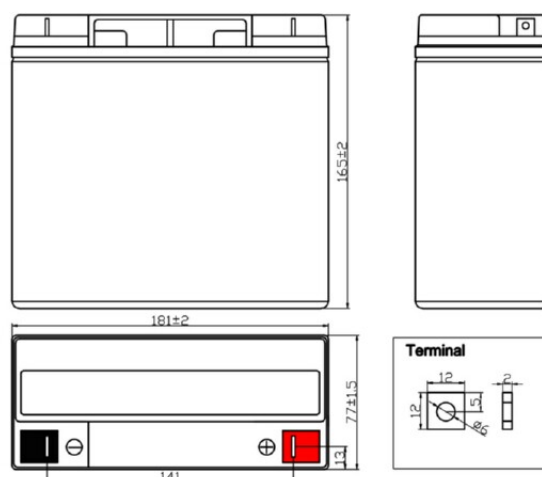




Specification

Nominal Voltage (V)	12V (6 cells in series)	
Rated Capacity	20Ah	(C ₂₀ , 1.75V/cell)
Dimensions(mm)	Length	181 ± 2 mm
	Width	77 ± 1.5 mm
	Height	165 ± 2 mm
	Total Height	165 ± 2 mm
Nominal Capacity @25°C (Ah)	20 Hour rate (1.010A to 10.5 volts)	20.2Ah
	10 Hour rate (1.930A to 10.5 volts)	19.3Ah
	5 Hour rate (3.450A to 10.5 volts)	17.2Ah
	1 Hour rate (13.00A to 9.6 volts)	13.0Ah
	15 min rate (38.50A to 9.6 volts)	9.62Ah
Approx. Weight	5.6 kg	
Terminal	T3	
Max.Discharge Current	300A @25°C (5s)	
Internal Resistance	10mΩ @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.	



Certification



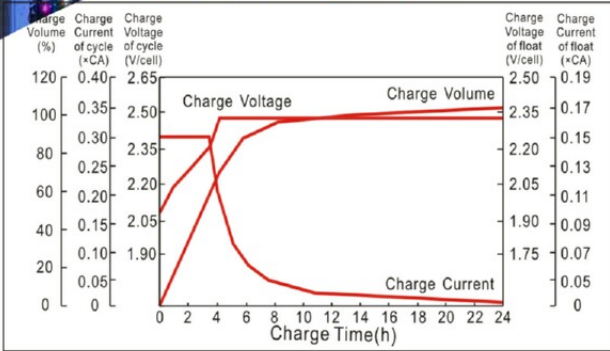
Constant Current Discharge Characteristics (A), (25°C)

F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	78.90	51.70	38.50	20.50	13.00	7.324	5.230	3.528	2.336	2.000	1.070
1.70V/cell	71.60	47.90	36.30	19.90	12.71	7.210	5.100	3.476	2.300	1.950	1.032
1.75V/cell	64.30	44.90	34.30	19.30	12.55	7.150	5.050	3.450	2.280	1.930	1.010
1.80V/cell	57.70	42.00	32.30	18.70	12.37	7.090	4.990	3.410	2.250	1.900	0.970

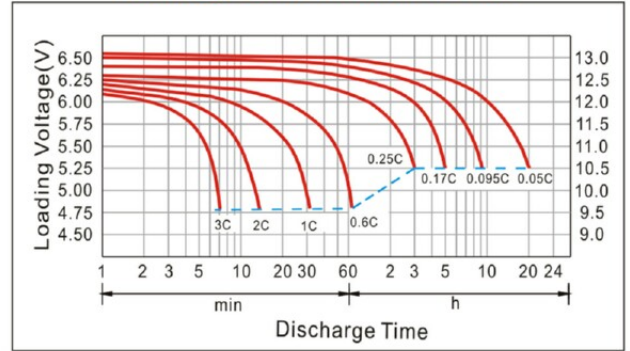
Constant Wattage Discharge Characteristics (Watt), (25°C)

F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	142.7	94.35	70.90	39.12	25.78	14.53	10.43	7.038	4.660	3.993	2.140
1.70V/cell	131.9	89.01	68.06	38.31	25.31	14.36	10.18	6.940	4.592	3.900	2.067
1.75V/cell	120.0	84.94	64.88	37.47	25.02	14.25	10.09	6.894	4.556	3.863	2.028
1.80V/cell	108.7	80.15	61.64	36.62	24.68	14.14	9.980	6.820	4.500	3.803	1.948

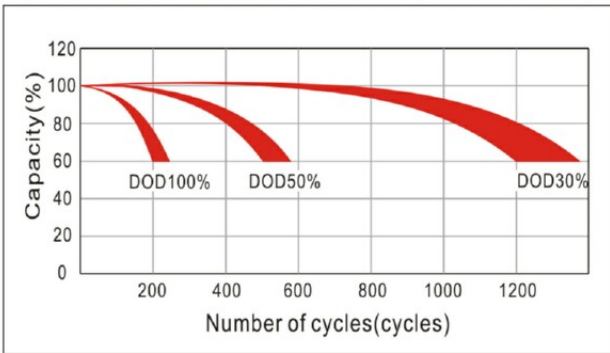
Charge Characteristics Curve



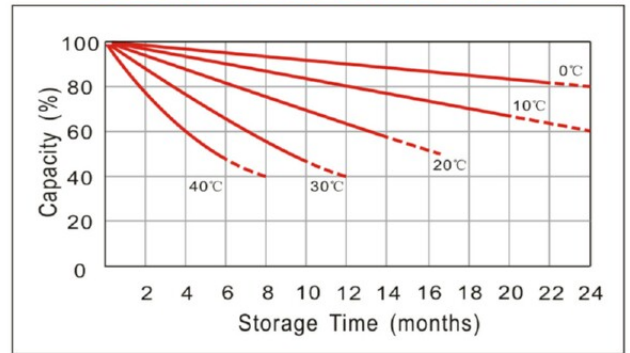
Discharge Characteristics Curve



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

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