



# DC2-1500 (2V1500Ah)

DC (Deep Cycle) series is specially designed for frequent cyclic discharge. By using strong grids and specially designed active material, the DC series battery offers 30% more cyclic life than the standby series. It is suitable for solar energy systems, marine and RV etc.



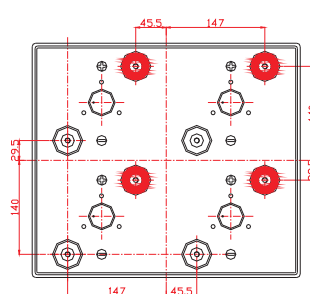
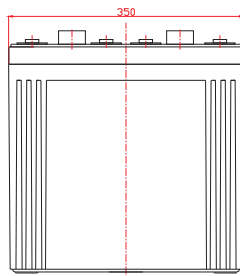
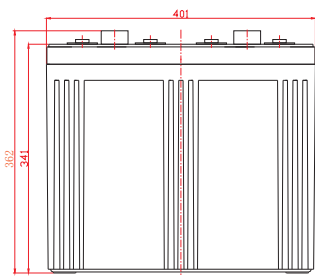
## Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	1500Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 96.0 Kg ( Tolerance ±1%)
Max. Discharge Current	6000 A (5 sec)
Internal Resistance	Approx.0.5 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ± 5°C
Float charging Voltage	2.27 to 2.3 VDC/unit Average at 25°C
Recommended Maximum Charging Current	300 A
Equalization and Cycle Service	2.43 to 2.47 VDC/unit Average at 25°C
Self Discharge	RITAR Valve Regulated Lead Acid (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.
Terminal	Thread insert & Bolt (F10)
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

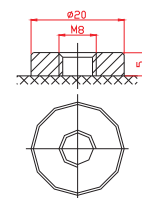


## Dimensions

Unit: mm Dimension: 401(L) × 350(W) × 341(H)



Terminal F10



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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	2037	1502	936.6	574.6	427.9	307.0	268.7	241.3	194.8	156.2
1.65V	1937	1442	924.7	553.6	410.0	296.3	266.0	235.5	186.0	154.7
1.70V	1806	1359	906.7	544.6	401.0	293.6	262.2	229.7	183.1	153.3
1.75V	1603	1223	834.9	514.7	380.0	277.4	258.8	218.0	177.3	151.6
1.80V	1380	1114	787.0	490.8	365.1	274.7	254.4	215.1	174.4	150.2
1.85V	1167	1003	727.2	463.8	347.1	253.2	239.4	203.5	165.7	141.0

### Constant Power Discharge Characteristics: W (25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	3565	2737	1743	1075	797.5	577.0	534.3	465.5	370.6	311.3
1.65V	3472	2723	1734	1060	781.8	568.4	529.3	459.6	367.5	308.3
1.70V	3280	2577	1717	1044	769.9	566.2	523.0	448.9	361.8	306.5
1.75V	2922	2322	1610	988.3	742.3	537.8	515.7	426.8	350.4	303.4
1.80V	2529	2119	1531	943.8	711.6	535.3	506.6	421.7	344.8	300.9
1.85V	2156	1910	1420	893.5	677.9	495.8	478.1	399.5	327.6	283.5

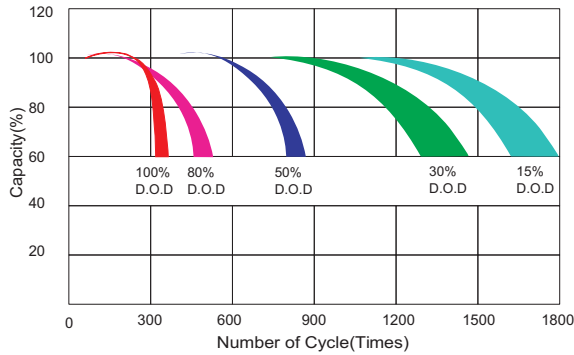
All mentioned values are average values (Tolerance ±2%).

# DC2-1500

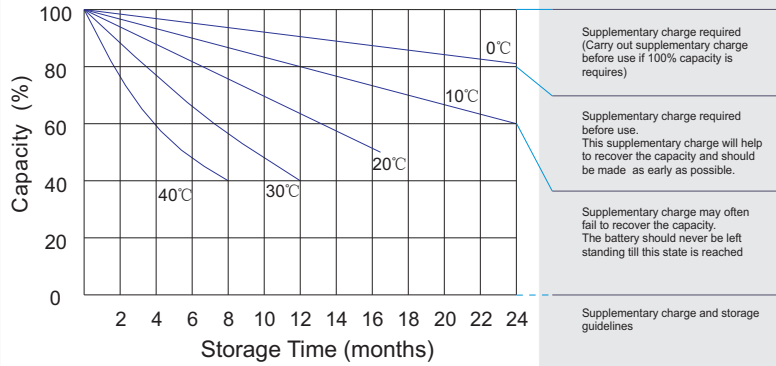
2V1500Ah



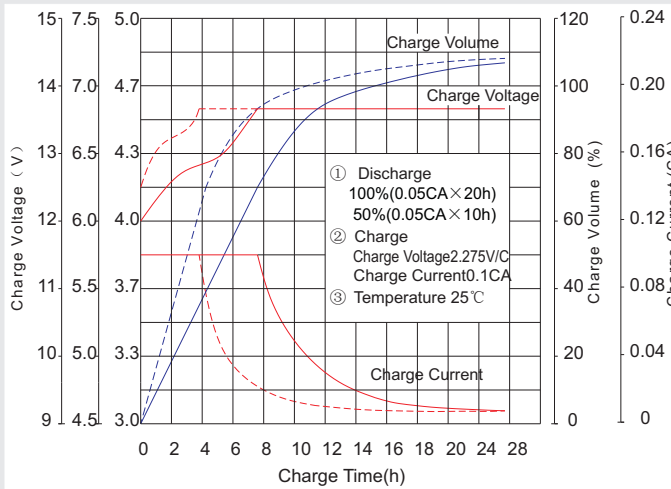
## Life characteristics of cyclic use



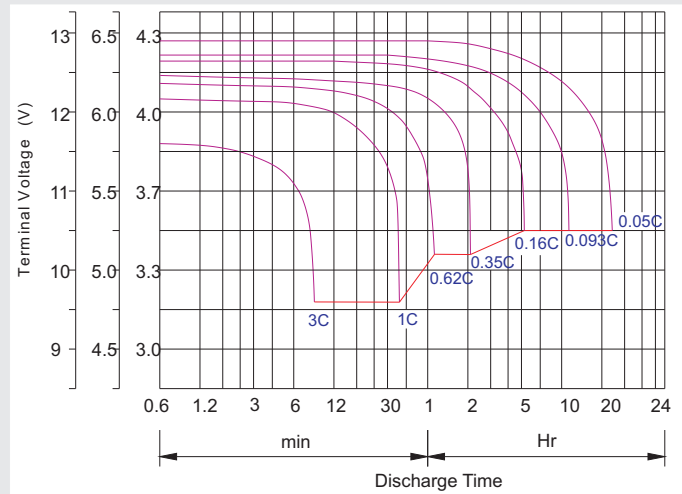
## Storage characteristic



## Charge characteristic curve for cyclic use



## Discharge characteristic curve



## 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%

## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V /cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

## Maintenance & Cautions

### 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.
- ※ Effect of temperature on float charge voltage: -4mV/°C/Cell.
- ※ There are a number of factors that will affect the length of cyclic service.
- The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
- Generally specking, the most important factors is depth of discharge.

**Charge the batteries at least once every six months, if they are stored at 25°C.**

Charging Method:

Constant Voltage	-0.2Cx2h+2.4-2.45V/cellx24h, Max. Current 0.2C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.2Cx6h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N·m	8~10N·m	10~12N·m