

# DC2-1800 (2V1800Ah)



## Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	1800Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 100.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 0.5 mΩ
Terminal	F10(M8)
Max. Discharge Current	7000A (5 sec)
Design Life	20 years (floating charge)
Max. Charging Current	360.0 A
Reference Capacity	C1 1100.0Ah C3 1393.2Ah C5 1570.5Ah C10 1800.0Ah
Float Charging Voltage	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.43 V~2.47 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, V, telecom, broadband and cable TV, UPS systems etc.



ISO 9001



ISO 14001



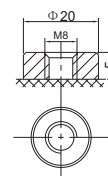
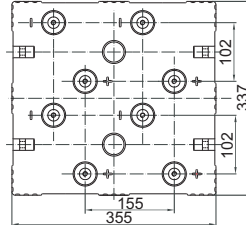
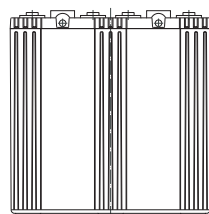
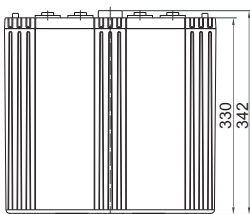
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MH 28539



## Dimensions



F10 TERMINAL

Length	355±2mm (14.0 inches)
Width	337±2mm (13.3 inches)
Height	330±2mm (13.0 inches)
Total Height	342±2mm (13.5 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

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

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	1723	1100	677.3	507.7	408.7	339.6	228.2	189.9
1.65V	1655	1062	655.7	492.0	397.6	330.8	225.7	187.6
1.70V	1582	1028	634.1	478.7	386.8	322.2	222.2	184.8
1.75V	1512	990.0	611.9	464.4	376.9	314.1	219.1	182.3
1.80V	1445	952.1	590.0	450.0	366.1	306.0	215.4	180.0
1.85V	1244	854.0	540.6	416.0	340.3	285.3	202.2	169.4

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

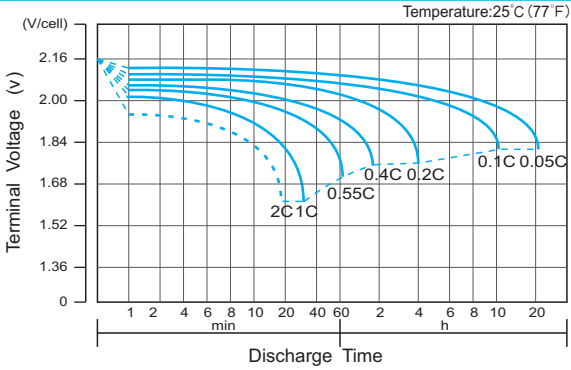
F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	3130	2067	1284	969.7	784.6	654.6	445.7	373.3
1.65V	3037	2007	1249	943.7	766.2	640.0	441.6	369.2
1.70V	2932	1954	1214	922.1	748.2	625.5	435.8	364.2
1.75V	2831	1894	1177	898.4	731.8	611.9	430.6	359.8
1.80V	2733	1832	1141	874.0	713.3	598.2	424.3	355.7
1.85V	2377	1653	1051	811.6	665.5	559.7	399.2	335.3

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C<sub>10</sub> should reach 95% after the first cycle and 100% after the third cycle.

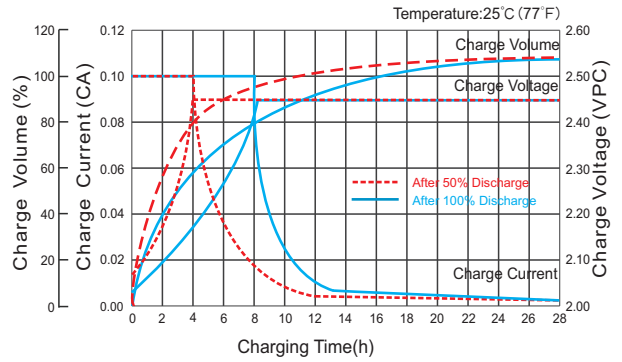
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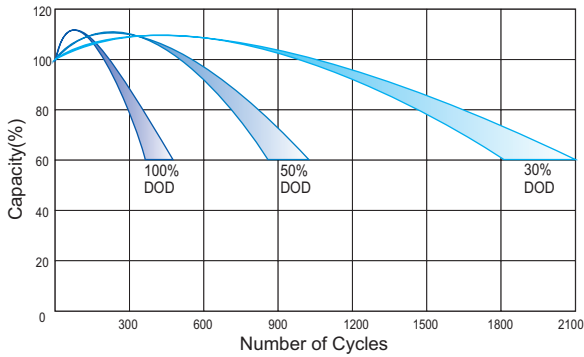
## Discharge Characteristics Curve



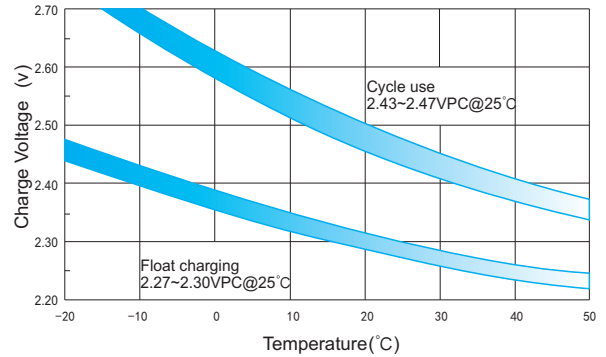
## Charge Characteristic Curve for Cycle Use(IU)



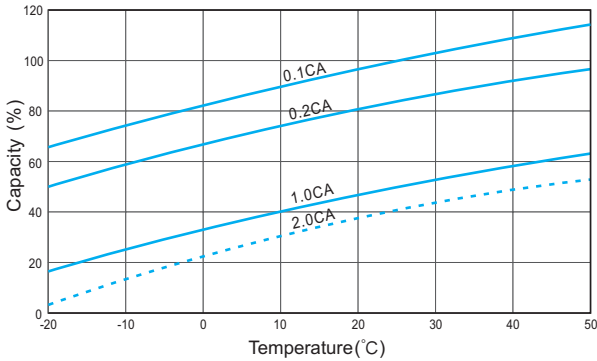
## Cycle Life in Relation to Depth of Discharge



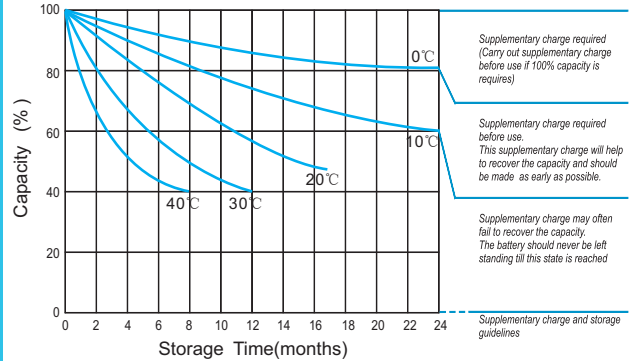
## Relationship Between Charging Voltage and Temperature



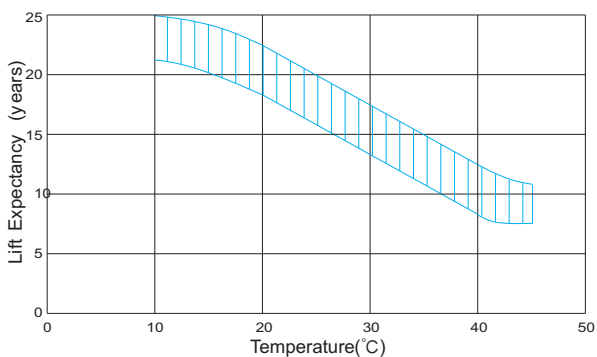
## Temperature Effects on Capacity



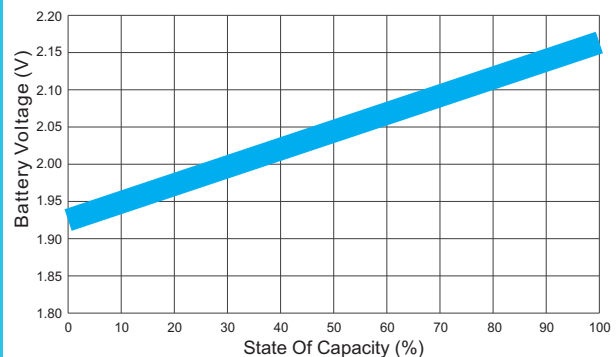
## Storage Characteristics



## Effect of Temperature on Long Term Life



## Relationship of OCV And State of Charge(20°C)



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.