

# DC2-1200 (2V1200Ah)



## Specification

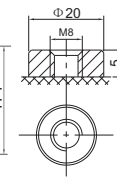
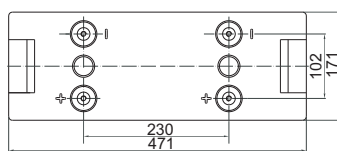
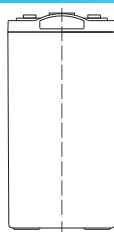
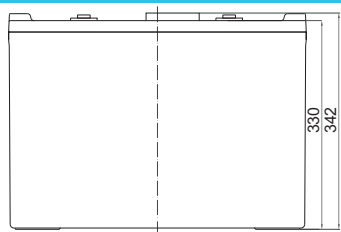


DC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% 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.



Cells Per Unit	1
Voltage Per Unit	2
Capacity	1200Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 64.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 0.54 mΩ
Terminal	F10(M8)
Max. Discharge Current	4800A (5 sec)
Design Life	20 years (floating charge)
Max. Charging Current	240.0 A
Reference Capacity	C1 733.2Ah C3 928.8Ah C5 1047.0Ah C10 1200.0Ah
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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

## Dimensions



F10 TERMINAL

Length	471±2mm (18.5 inches)
Width	171±2mm (6.73 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	1149	733.2	451.5	338.5	272.5	226.4	152.1	126.6
1.65V	1103	708.1	437.1	328.0	265.1	220.5	150.4	125.1
1.70V	1054	685.0	422.7	319.1	257.9	214.8	148.1	123.2
1.75V	1008	660.0	407.9	309.6	251.3	209.4	146.1	121.5
1.80V	963.2	634.7	393.3	300.0	244.0	204.0	143.6	120.0
1.85V	829.6	569.3	360.4	277.3	226.8	190.2	134.8	113.0

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

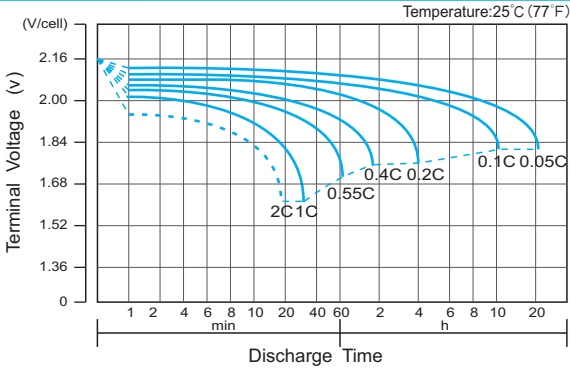
F.V./Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	2087	1378	855.8	646.5	523.1	436.4	297.1	248.9
1.65V	2025	1338	832.5	629.1	510.8	426.7	294.4	246.2
1.70V	1955	1303	809.5	614.8	498.8	417.0	290.5	242.8
1.75V	1887	1263	784.8	598.9	487.9	407.9	287.1	239.9
1.80V	1822	1222	760.5	582.7	475.6	398.8	282.8	237.1
1.85V	1585	1102	700.6	541.1	443.7	373.1	266.1	223.5

(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.

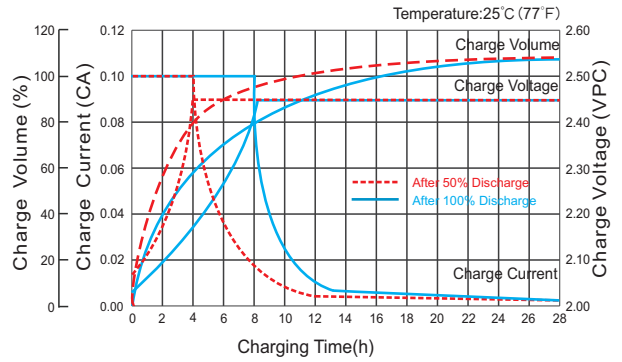
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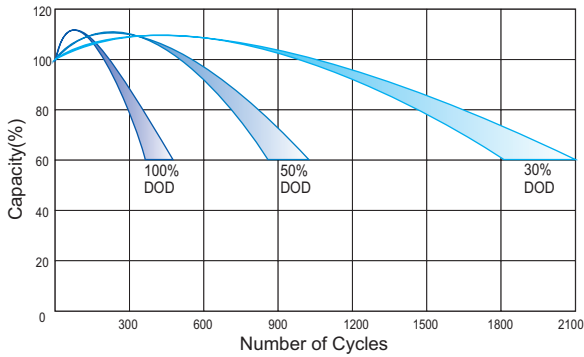
## Discharge Characteristics Curve



## Charge Characteristic Curve for Cycle Use(IU)



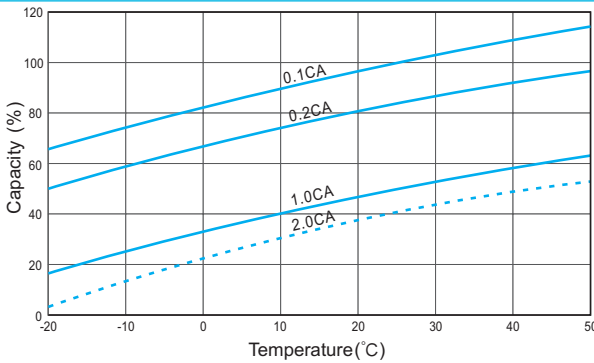
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



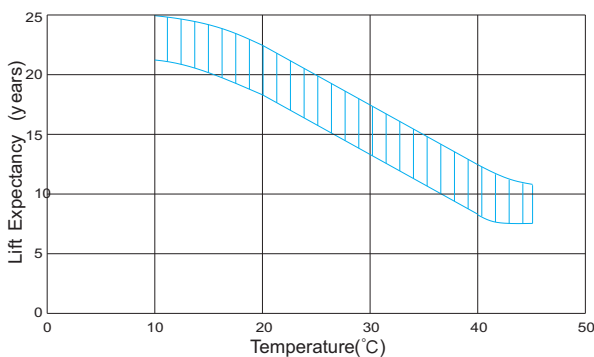
## Temperature Effects on Capacity



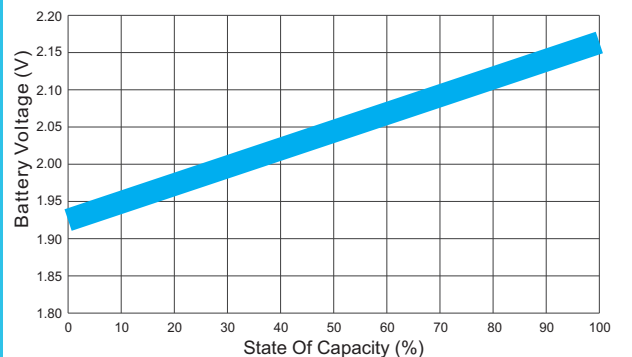
## Storage Characteristics



## 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.