

# DC12-55(12V55Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 18.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 6 mΩ
Terminal	F11(M6)/F15(M6)
Max. Discharge Current	550A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	16.5 A
Reference Capacity	C3 49.8AH C5 46.0AH C10 52.3AH C20 55.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 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.



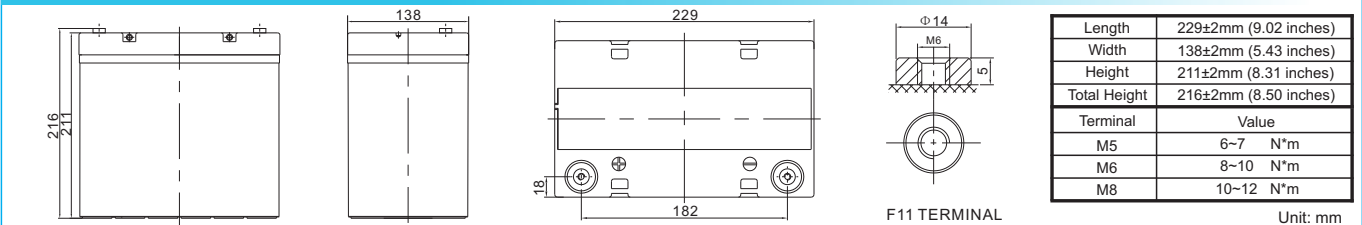
DC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% 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      OHSAS 18001



## Dimensions



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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	183.2	134.7	100.6	57.69	33.34	19.52	14.53	11.51	9.70	6.62	5.61	2.86
1.65V	176.4	130.3	97.55	56.48	32.71	19.19	14.31	11.35	9.58	6.55	5.55	2.83
1.70V	167.6	124.4	93.60	54.88	31.87	18.75	14.01	11.14	9.42	6.45	5.48	2.80
1.75V	155.8	116.6	88.29	52.70	30.73	18.15	13.61	10.85	9.20	6.31	5.37	2.75
1.80V	140.3	106.1	81.14	49.71	29.16	17.31	13.05	10.45	8.89	6.12	5.23	2.68
1.85V	119.2	91.75	71.28	45.49	26.93	16.12	12.24	9.86	8.44	5.84	5.01	2.58

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

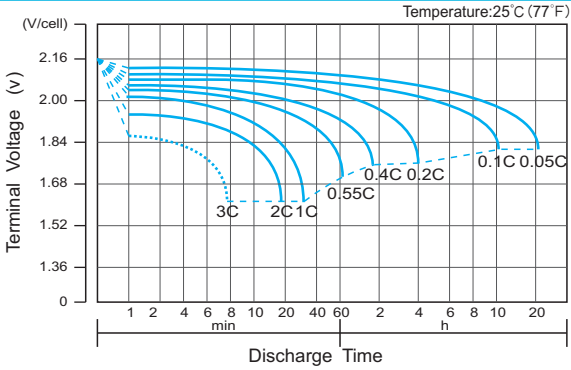
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	311	229	176	105	62.3	37.0	27.8	22.1	18.7	12.9	11.0	5.63
1.65V	307	227	174	104	61.8	36.6	27.5	21.9	18.6	12.8	10.9	5.59
1.70V	295	219	169	102	60.4	35.9	27.0	21.5	18.3	12.6	10.8	5.52
1.75V	279	209	161	99	58.6	34.9	26.3	21.1	17.9	12.4	10.6	5.44
1.80V	256	194	150	94.1	55.8	33.5	25.3	20.4	17.4	12.1	10.3	5.31
1.85V	221	171	134	86.9	51.9	31.3	23.9	19.3	16.6	11.5	9.9	5.12

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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## Discharge Characteristics Curve



## Charge Characteristic Curve for Cycle Use(IU)



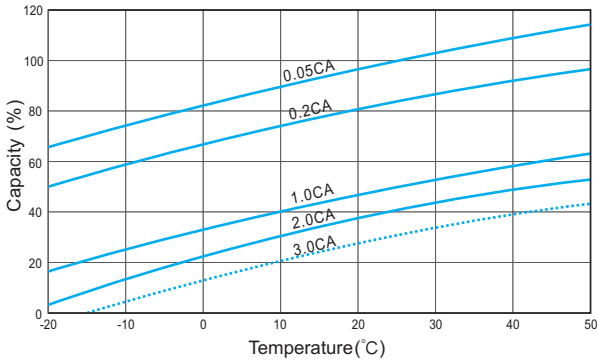
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



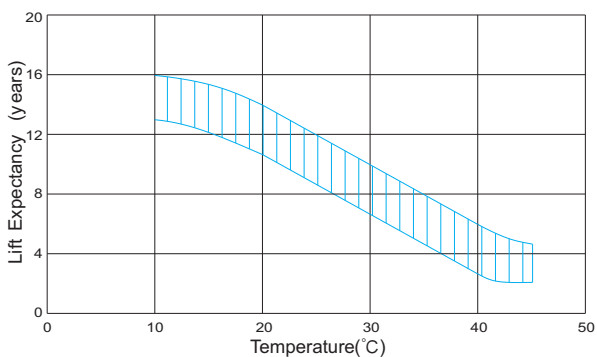
## Temperature Effects on Capacity



## 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.