

# DC12-200 (12V200Ah)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 60.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 4 mΩ
Terminal	F10(M8)/F16(M8)
Max. Discharge Current	2000A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	60.0 A
Reference Capacity	C3 147.3AH C5 167.0AH C10 190.0AH C20 200.0AH
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.



## Dimensions

Length	522±2mm (20.6 inches)
Width	240±2mm (9.45 inches)
Height	219±2mm (8.62 inches)
Total Height	224±2mm (8.82 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	396.7	312.7	181.3	113.8	70.3	52.4	41.8	35.3	24.1	20.4	10.4
1.65V	383.5	303.3	177.5	111.7	69.1	51.6	41.3	34.8	23.8	20.2	10.3
1.70V	366.2	291.0	172.4	108.8	67.5	50.5	40.5	34.2	23.4	19.9	10.2
1.75V	343.1	274.5	165.6	104.9	65.3	49.1	39.5	33.4	22.9	19.5	10.0
1.80V	312.3	252.3	156.2	99.6	62.3	47.0	38.0	32.3	22.3	19.0	9.75
1.85V	270.1	221.6	142.9	92.0	58.0	44.1	35.9	30.7	21.3	18.2	9.40

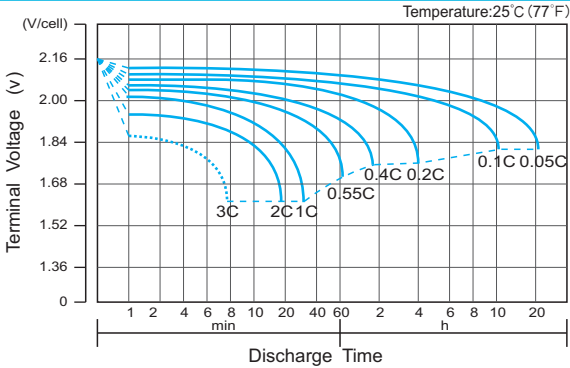
### Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	710	575	347	224	140	105	84.6	71.6	49.5	42.2	21.5
1.65V	704	570	344	222	139	104	83.8	71.0	49.1	41.9	21.4
1.70V	680	552	336	217	136	102	82.5	70.0	48.4	41.3	21.1
1.75V	649	528	326	210	132	99.9	80.6	68.6	47.5	40.6	20.8
1.80V	601	492	311	201	127	96.1	77.9	66.5	46.2	39.5	20.3
1.85V	529	438	287	187	119	90.6	73.8	63.4	44.2	38.0	19.6

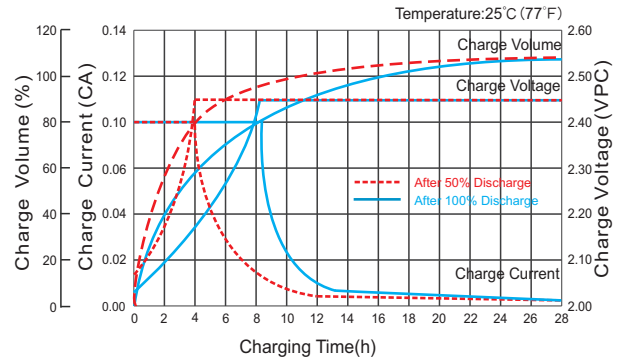
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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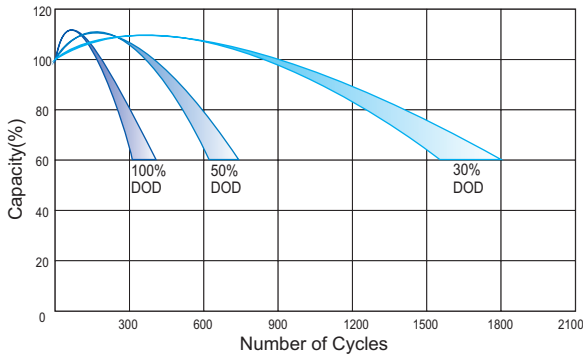
## Discharge Characteristics Curve



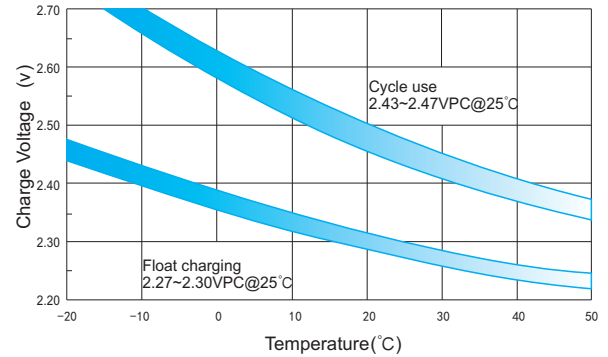
## Charge Characteristic Curve for Cycle Use(IU)



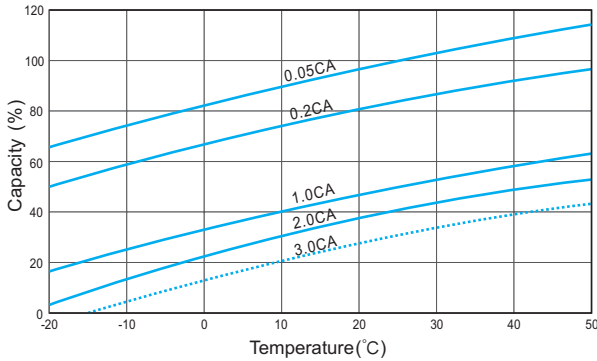
## Cycle Life in Relation to Depth of Discharge



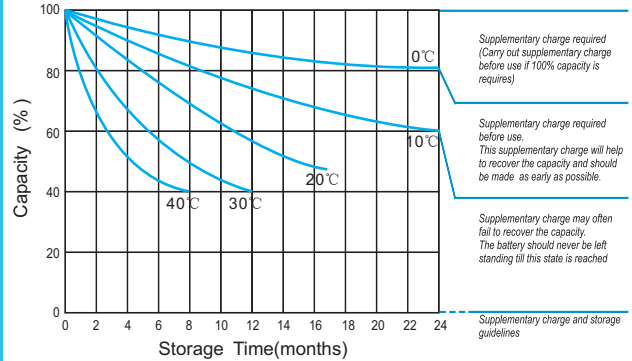
## Relationship Between Charging Voltage and Temperature



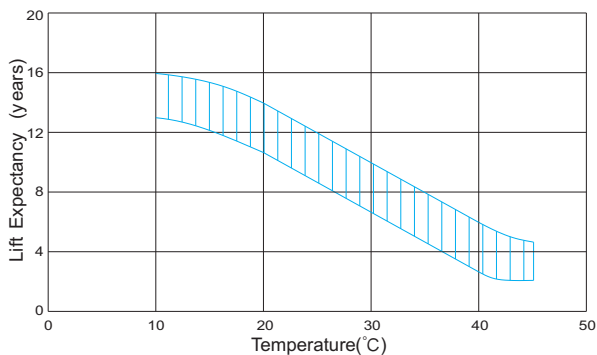
## Temperature Effects on Capacity



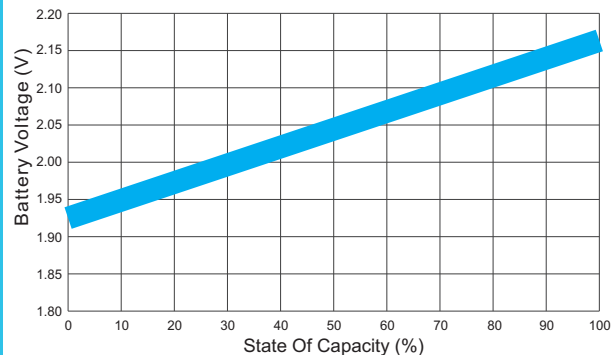
## Storage Characteristics



## 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, Ritars reserves the right to explain and update the latest information.