

# DC12-180 (12V180Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	180Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 53.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 4 mΩ
Terminal	F12(M8)/F16(M8)
Max. Discharge Current	1800A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	54.0 A
Reference Capacity	C3 132.3AH C5 150.5AH C10 171.0AH C20 180.0AH
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

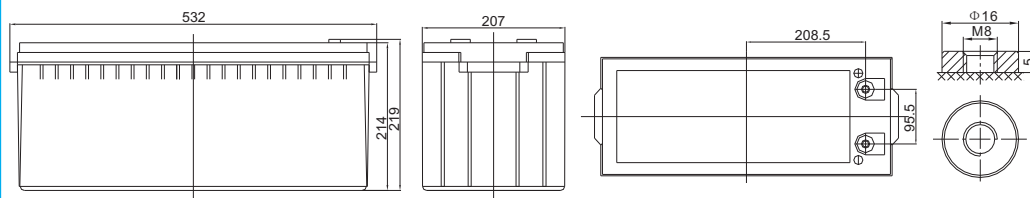


MH 28539



G4M20206-0910-E-16

## Dimensions



Length	532±2mm (20.9 inches)
Width	207±2mm (8.15 inches)
Height	214±2mm (8.43 inches)
Total Height	219±2mm (8.62 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F12 Terminal

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	357.0	281.4	163.1	102.4	63.3	47.1	37.7	31.7	21.7	18.4	9.35
1.65V	345.1	273.0	159.7	100.5	62.2	46.4	37.1	31.3	21.4	18.2	9.27
1.70V	329.6	261.9	155.2	97.9	60.7	45.5	36.5	30.8	21.1	17.9	9.16
1.75V	308.8	247.1	149.0	94.4	58.8	44.1	35.5	30.1	20.7	17.6	9.00
1.80V	281.0	227.0	140.6	89.6	56.1	42.3	34.2	29.1	20.0	17.1	8.78
1.85V	243.1	199.5	128.6	82.8	52.2	39.7	32.3	27.6	19.1	16.4	8.46

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

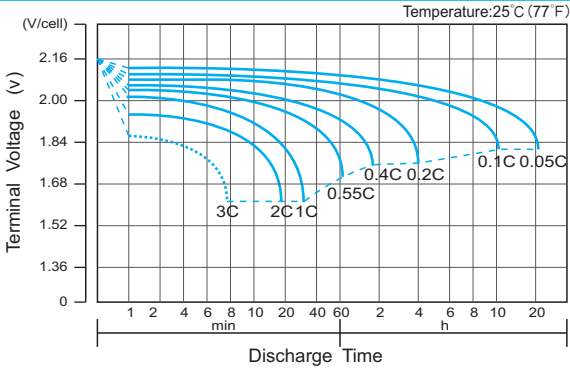
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	639	518	312	202	126	94.8	76.1	64.4	44.5	38.0	19.4
1.65V	634	513	310	200	125	93.9	75.5	63.9	44.2	37.7	19.2
1.70V	612	496	303	195	122	92.2	74.2	63.0	43.6	37.2	19.0
1.75V	584	475	294	189	119	89.9	72.6	61.7	42.7	36.5	18.7
1.80V	541	443	280	181	114	86.5	70.1	59.9	41.5	35.6	18.3
1.85V	476	394	259	168	107	81.5	66.5	57.1	39.8	34.2	17.6

(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)



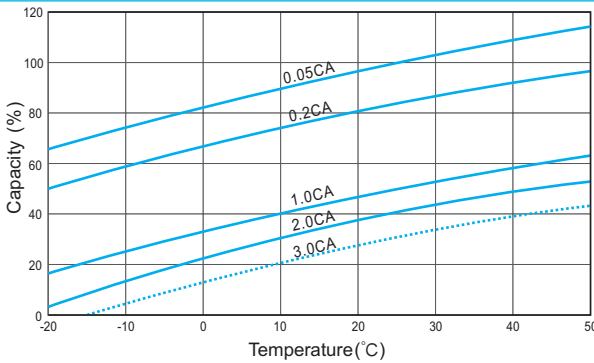
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



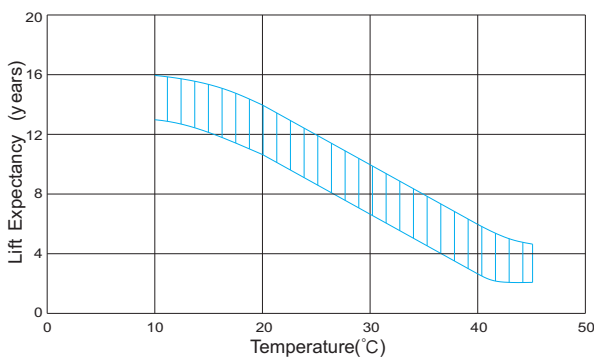
## Temperature Effects on Capacity



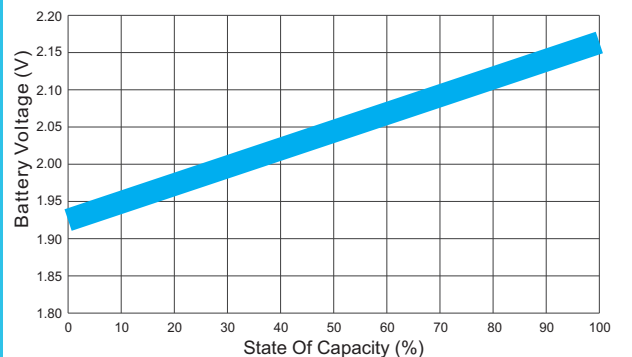
## Storage Characteristics



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