DC12-100S(12V100Ah)

RITAR®

Specification

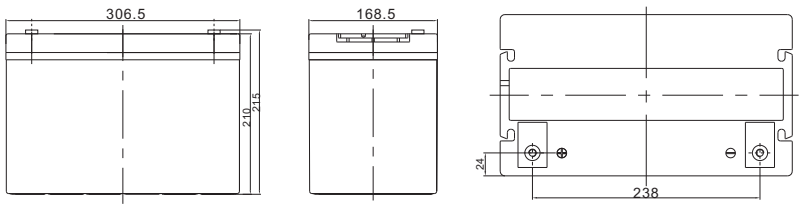
Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 29.0 Kg (Tolerance±2%)
Internal Resistance	Approx. 4.8 mΩ
Terminal	F12(M8)/F15(M6)
Max. Discharge Current	1000A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 74.4AH C5 83.5AH C10 95.0AH C20 100.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

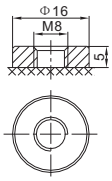
DC (Deep Cycle) series batteries provide superior high integrity and reliability.It is specially designed for frequent cyclic charge and discharge.By using strong grids,thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% more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





F12 Terminal

Length	306.5±2mm (12.1 inches)
Width	168.5±2mm (6.63 inches)
Height	210±2mm (8.27 inches)
Total Height	215±2mm (8.46 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℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	218.6	170.2	99.7	58.7	35.1	26.5	20.9	17.6	12.0	10.2	5.20
1.65V	211.3	165.1	97.6	57.6	34.5	26.1	20.6	17.4	11.9	10.1	5.15
1.70V	201.8	158.4	94.8	56.1	33.7	25.5	20.3	17.1	11.7	10.0	5.09
1.75V	189.1	149.5	91.1	54.1	32.7	24.8	19.7	16.7	11.5	9.77	5.00
1.80V	172.1	137.3	85.9	51.3	31.2	23.8	19.0	16.2	11.1	9.50	4.88
1.85V	148.9	120.7	78.6	47.4	29.0	22.3	17.9	15.4	10.6	9.12	4.70

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	391	313	191	116	70.1	53.2	42.3	35.8	24.7	21.1	10.8
1.65V	388	310	189	115	69.4	52.7	41.9	35.5	24.5	20.9	10.7
1.70V	375	300	185	112	68.0	51.7	41.2	35.0	24.2	20.7	10.6
1.75V	358	287	180	109	66.1	50.5	40.3	34.3	23.7	20.3	10.4
1.80V	331	268	171	103	63.4	48.6	39.0	33.3	23.1	19.8	10.2
1.85V	291	239	158	96.2	59.4	45.8	36.9	31.7	22.1	19.0	9.80

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

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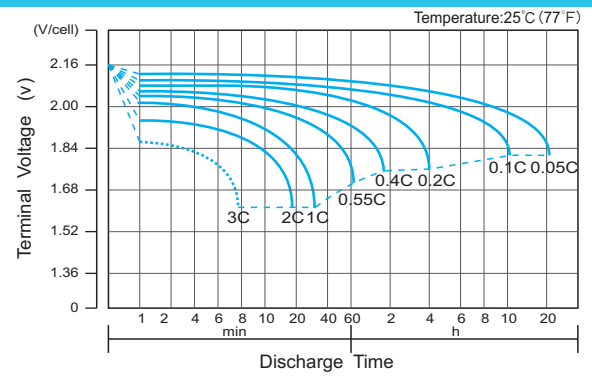
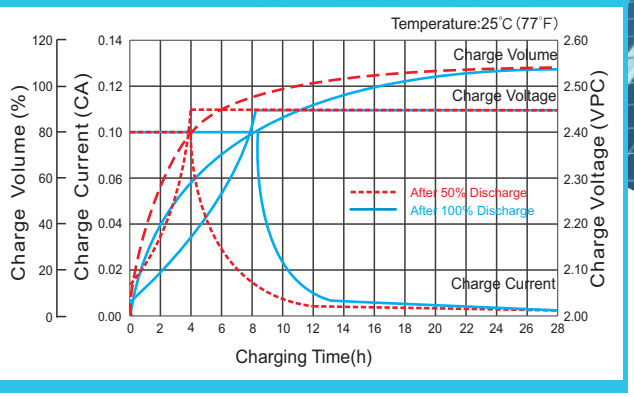
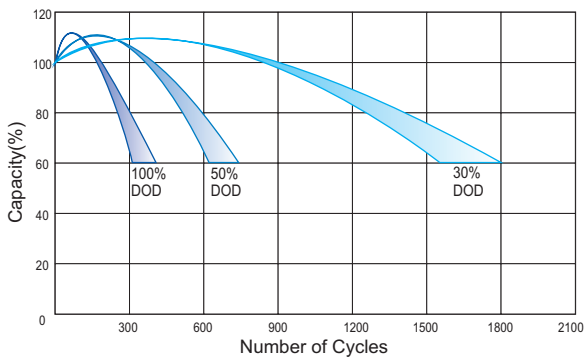
Discharge Characteristics Curve



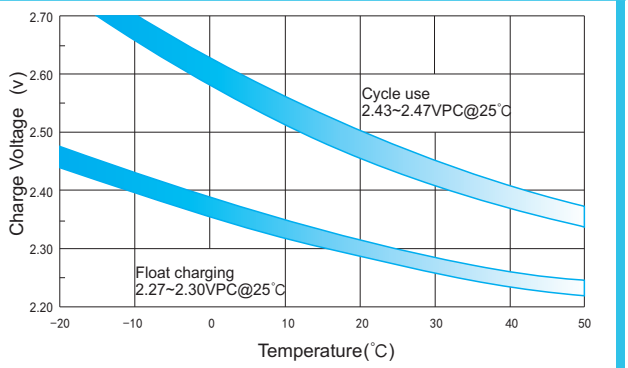
Charge Characteristic Curve for Cycle Use(IU)



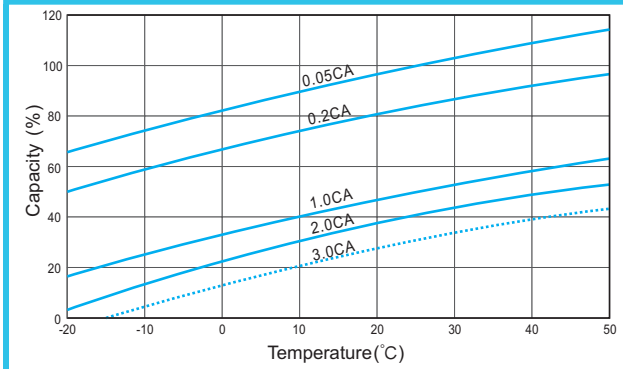
Cycle Life in Relation to Depth of Discharge



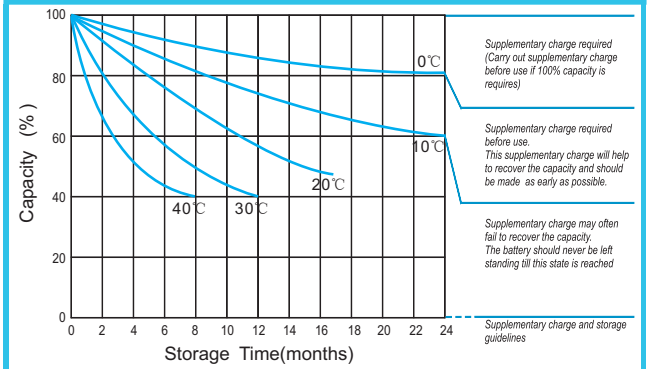
Relationship Between Charging Voltage and Temperature



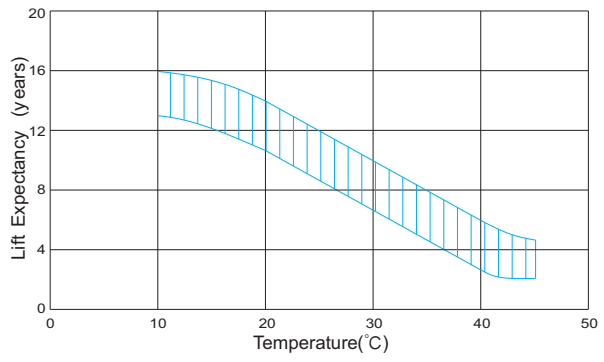
Temperature Effects on Capacity



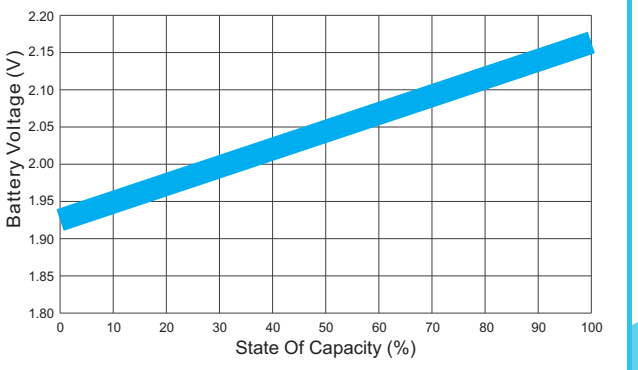
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)



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

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