

DC12-100 (12V100Ah)



Specification

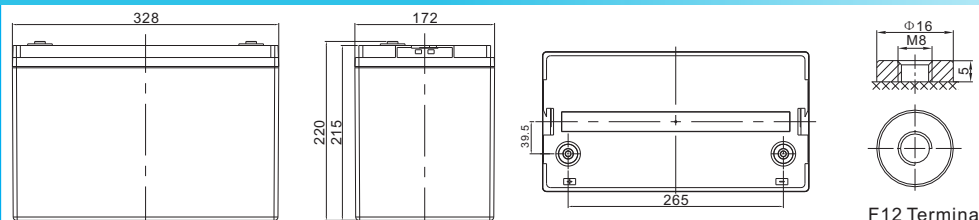
Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 30.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 78.3AH C5 88.0AH C10 100.0AH C20 105.2AH
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 offers 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, RV, telecom, broadband and cable TV, UPS systems etc.



Dimensions



Length	328±1mm (12.9 inches)
Width	172±1mm (6.77 inches)
Height	215±1mm (8.46 inches)
Total Height	220±1mm (8.66 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	237.2	182.8	106.0	62.4	37.4	27.8	22.0	18.6	12.7	10.7	5.47
1.65V	229.3	177.4	103.8	61.2	36.7	27.4	21.7	18.3	12.5	10.6	5.42
1.70V	219.0	170.2	100.8	59.7	35.9	26.9	21.3	18.0	12.3	10.5	5.35
1.75V	205.2	160.5	96.8	57.5	34.7	26.1	20.8	17.6	12.1	10.3	5.26
1.80V	186.8	147.5	91.3	54.6	33.1	25.0	20.0	17.0	11.7	10.0	5.13
1.85V	161.5	129.6	83.6	50.4	30.9	23.5	18.9	16.2	11.2	9.60	4.95

Constant Power Discharge Characteristics : WPC(25°C)

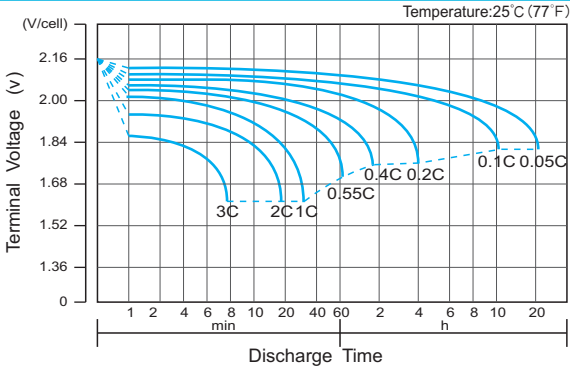
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	403	320	193	117	70.8	53.2	42.3	35.8	24.7	21.1	10.8
1.65V	400	317	191	116	70.1	52.7	41.9	35.5	24.5	20.9	10.7
1.70V	386	306	187	113	68.7	51.7	41.2	35.0	24.2	20.7	10.6
1.75V	369	293	181	110	66.8	50.5	40.3	34.3	23.7	20.3	10.4
1.80V	341	273	173	105	64.1	48.6	39.0	33.3	23.1	19.8	10.2
1.85V	300	244	160	97.2	60.0	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.

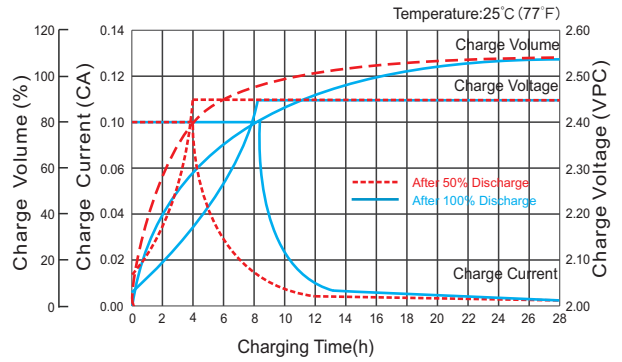
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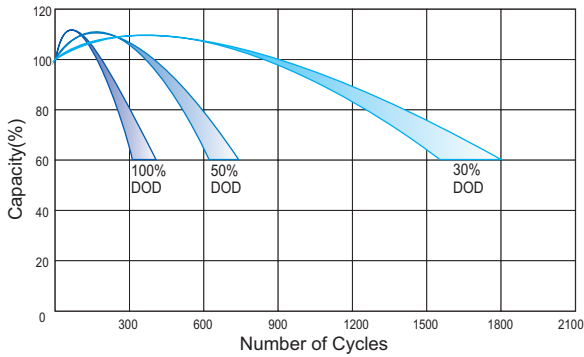
Discharge Characteristics Curve



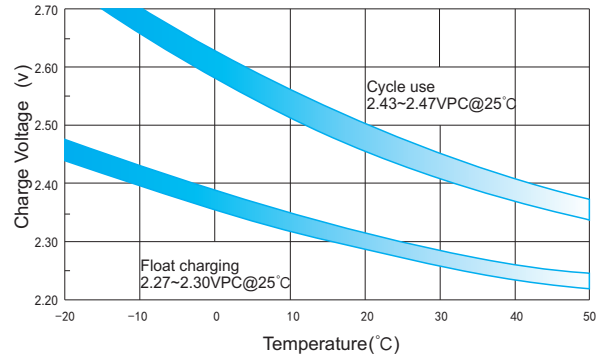
Charge Characteristic Curve for Cycle Use(IU)



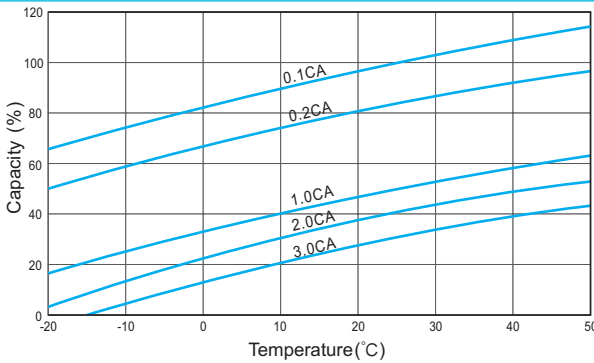
Cycle Life in Relation to Depth of Discharge



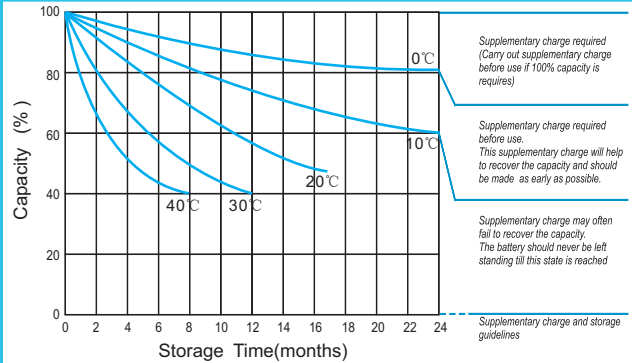
Relationship Between Charging Voltage and Temperature



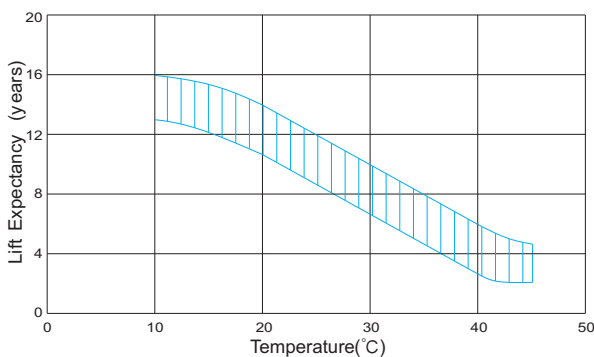
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)

