

DC12-120S (12V114Ah)

RITAR®

Specification



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

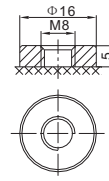
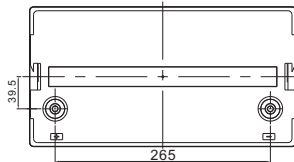
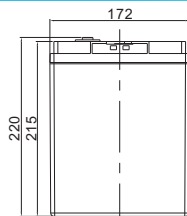
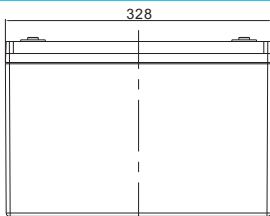


MH 28539

G4M20206-0910-E-16

Cells Per Unit	6
Voltage Per Unit	12
Capacity	114Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 31.5 Kg (Tolerance ±2%)
Internal Resistance	Approx. 4.2 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1140A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	34.5 A
Reference Capacity	C3 86.1AH C5 97.0AH C10 110.0AH C20 114.0AH
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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions



F12 Terminal

Length	328±2mm (12.9 inches)
Width	172±2mm (6.77 inches)
Height	215±2mm (8.46 inches)
Total Height	220±2mm (8.66 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	250.5	193.1	111.9	65.9	40.7	30.6	24.2	20.4	13.9	11.8	5.92
1.65V	242.2	187.3	109.6	64.6	40.0	30.2	23.9	20.2	13.8	11.7	5.87
1.70V	231.3	179.7	106.5	63.0	39.1	29.5	23.5	19.8	13.6	11.5	5.80
1.75V	216.7	169.5	102.3	60.7	37.8	28.7	22.8	19.4	13.3	11.3	5.70
1.80V	197.2	155.8	96.5	57.6	36.1	27.5	22.0	18.7	12.9	11.0	5.56
1.85V	170.6	136.9	88.3	53.2	33.6	25.8	20.8	17.8	12.3	10.6	5.36

Constant Power Discharge Characteristics : WPC(25°C)

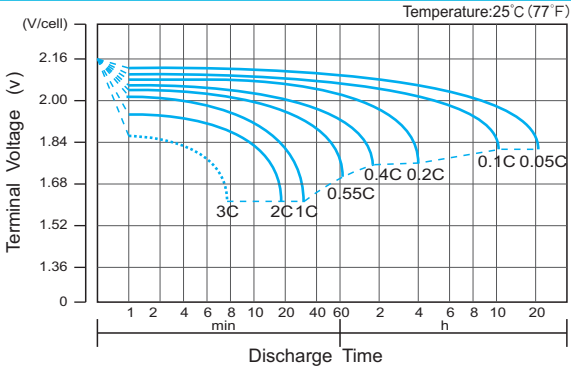
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	448.3	355.3	214.0	129.7	81.2	61.6	49.0	41.4	28.6	24.4	12.3
1.65V	444.8	351.9	212.6	128.6	80.4	61.0	48.5	41.1	28.4	24.2	12.2
1.70V	429.6	340.6	207.8	125.7	78.8	59.9	47.7	40.5	28.0	23.9	12.1
1.75V	409.8	326.0	201.6	121.9	76.6	58.4	46.7	39.7	27.5	23.5	11.9
1.80V	379.4	303.8	192.1	116.2	73.4	56.2	45.1	38.5	26.7	22.9	11.6
1.85V	334.0	270.7	177.5	108.1	68.8	53.0	42.7	36.7	25.6	22.0	11.2

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

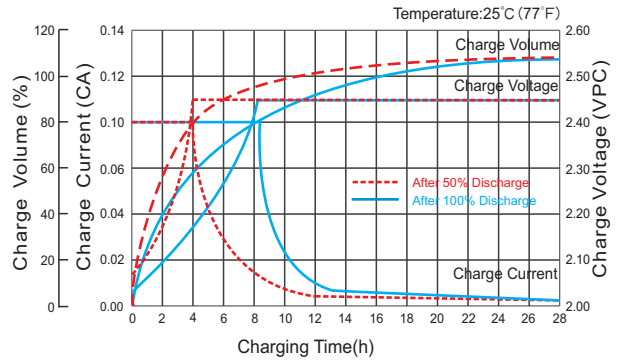
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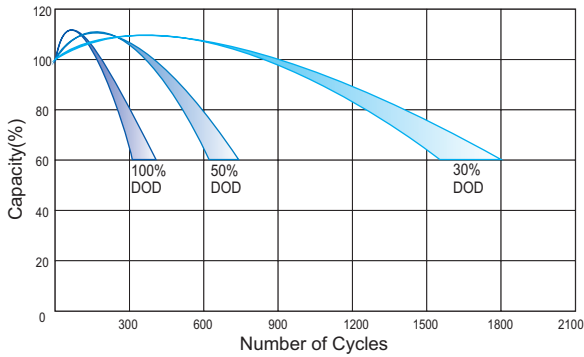
Discharge Characteristics Curve



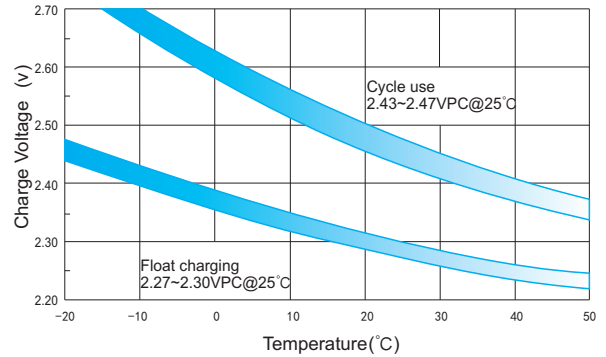
Charge Characteristic Curve for Cycle Use(IU)



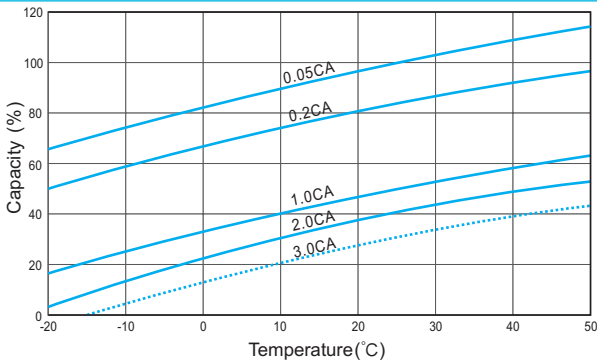
Cycle Life in Relation to Depth of Discharge



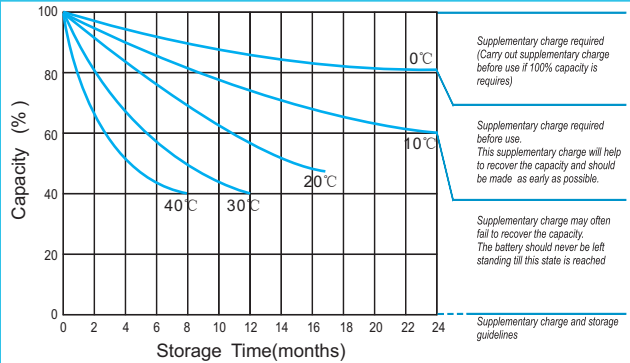
Relationship Between Charging Voltage and Temperature



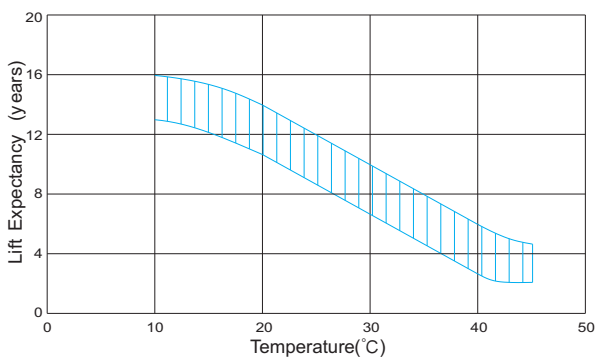
Temperature Effects on Capacity



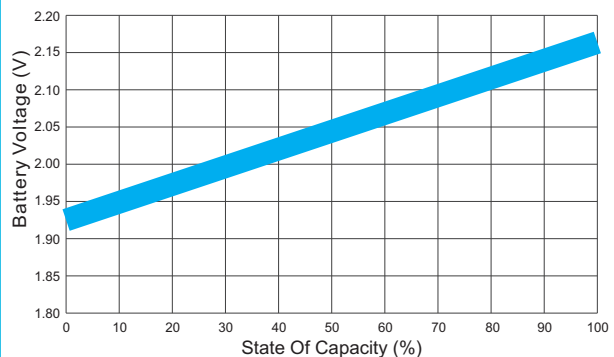
Storage Characteristics



Effect of Temperature on Long Term Life



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



For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:

Moore & Moore Solutions, Inc.
 Phone: 484-302-7009
 Email: mr@mooreu.com
 www.MooreU.com