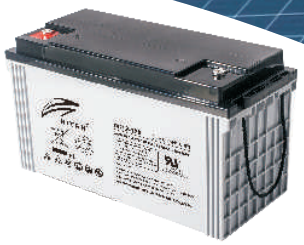
DC12-120(12V120Ah)

RITAR®

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	120Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 35.0 Kg (Tolerance±2%)
Internal Resistance	Approx. 4 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1200A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	36.0 A
Reference Capacity	C3 89.1AH C5 100.5AH C10 114.0AH C20 120.0AH
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.

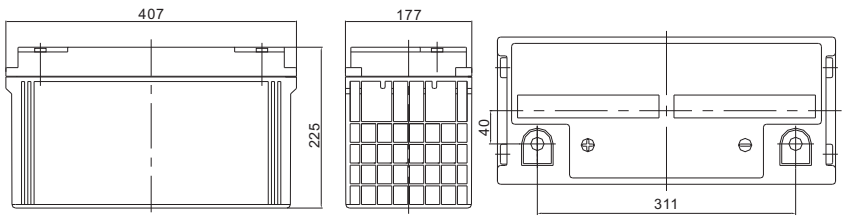


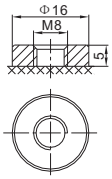
DC (Deep Cycle) series batteries provide superior high integrity and reliability.It is specially designed for frequent cyclic charge and discharge.By using strong grids,thick plate and specially active material are designed for repeated deep-discharge applications. The DC series batteries offer 30% more 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	407±2mm (16.0 inches)
Width	177±2mm (6.97 inches)
Height	225±2mm (8.86 inches)
Total Height	225±2mm (8.86 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	259.6	200.1	116.0	68.3	42.2	31.7	25.1	21.2	14.4	12.2	6.24
1.65V	251.0	194.1	113.6	67.0	41.5	31.3	24.8	20.9	14.3	12.1	6.18
1.70V	239.7	186.2	110.4	65.3	40.5	30.6	24.3	20.5	14.1	11.9	6.10
1.75V	224.6	175.7	106.0	63.0	39.2	29.7	23.7	20.1	13.8	11.7	6.00
1.80V	204.4	161.5	100.0	59.7	37.4	28.5	22.8	19.4	13.4	11.4	5.85
1.85V	176.8	141.8	91.5	55.2	34.8	26.7	21.5	18.4	12.8	10.9	5.64

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	465	368	222	134	84.1	63.8	50.7	42.9	29.7	25.3	12.9
1.65V	461	365	220	133	83.3	63.2	50.3	42.6	29.5	25.1	12.8
1.70V	445	353	215	130	81.6	62.1	49.5	42.0	29.0	24.8	12.7
1.75V	425	338	209	126	79.4	60.5	48.4	41.2	28.5	24.4	12.5
1.80V	393	315	199	120	76.1	58.3	46.7	39.9	27.7	23.7	12.2
1.85V	346	281	184	112	71.3	54.9	44.3	38.0	26.5	22.8	11.8

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

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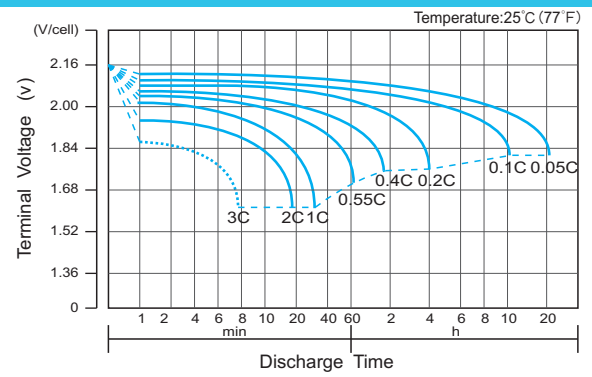
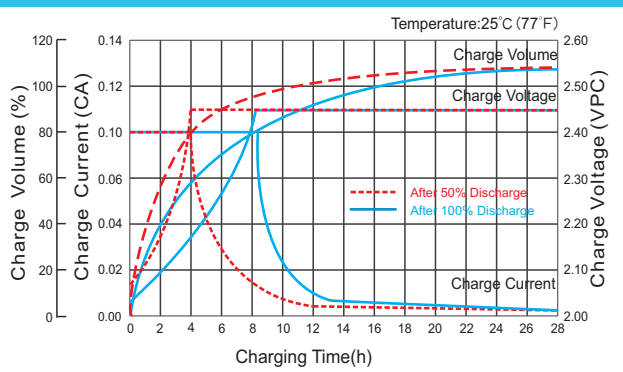
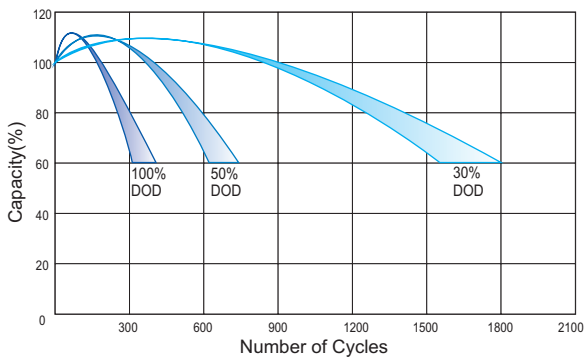
Discharge Characteristics Curve



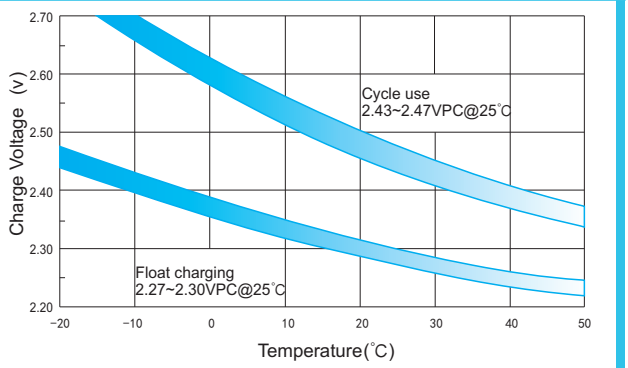
Charge Characteristic Curve for Cycle Use(IU)



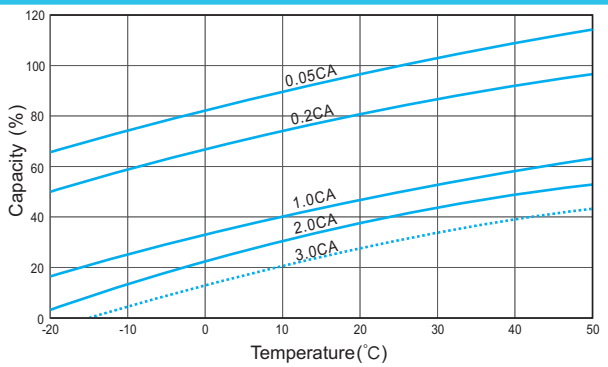
Cycle Life in Relation to Depth of Discharge



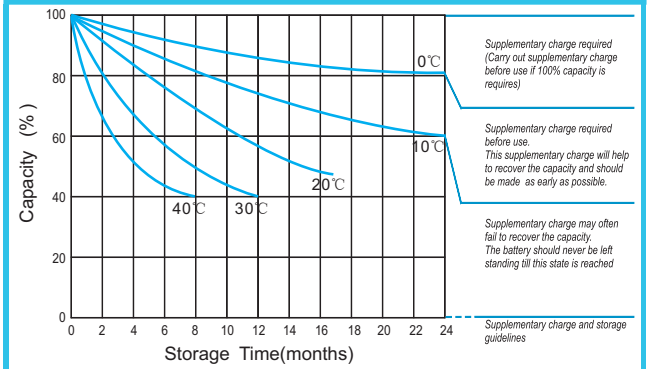
Relationship Between Charging Voltage and Temperature



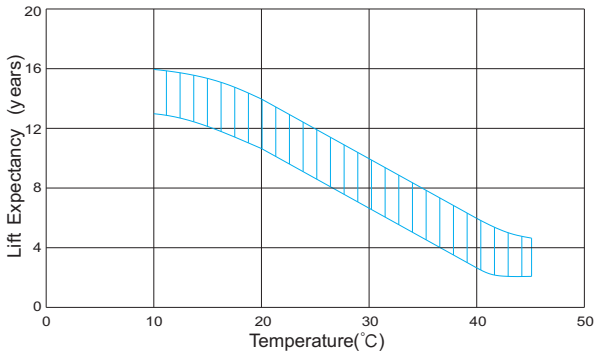
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)