



EV12-110(12V110Ah)



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	110Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 30.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F12(M8)
Max. Discharge Current	1100A (5 sec)
Cold Cranking Ampere(CCA)	700A
Maxi. Charging Current	33.0A
Reference Capacity	C3 85.2AH
	C5 96.0AH
	C10 110.0AH
	C20 116.6AH
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.



EV (Electric Vehicle) series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids and thick plate construction, the EV series battery offers reliable performance in high load situations and could provide competitive cycle performance. It is suitable for Electric Vehicle and Golf cart, Floor Machines, Forklifts, Aerial lifts, Robotics, Marine, RV, Mobility and Medical Equipment, and most outdoor application.



ISO 9001

ISO 14001

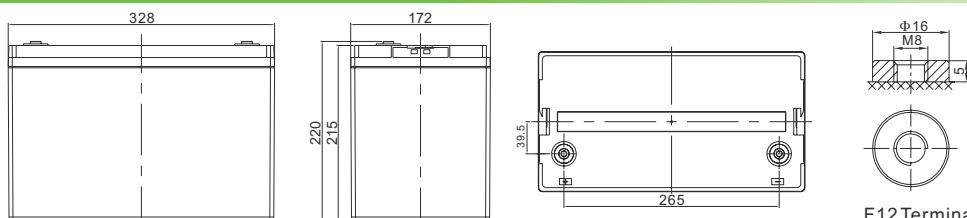
OHSAS 18001



MH 28539

G4M20206-0910-E-16

Dimensions



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

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	265.3	206.5	122.9	67.9	40.1	31.1	24.4	20.8	14.0	11.6	6.07
1.65V	250.6	197.4	118.0	65.6	38.8	30.1	23.7	20.2	13.8	11.5	5.97
1.70V	230.8	184.9	112.7	63.4	37.5	29.3	23.1	19.7	13.6	11.3	5.90
1.75V	211.2	172.1	107.8	61.1	36.2	28.4	22.5	19.2	13.4	11.1	5.83
1.80V	191.2	158.9	103.0	58.8	34.9	27.5	21.9	18.7	13.2	11.0	5.77
1.85V	156.3	131.8	88.7	52.7	32.0	25.4	20.3	17.5	12.4	10.4	5.48

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	450.9	361.0	223.2	127.6	76.0	59.3	46.9	40.0	27.3	22.8	12.0
1.65V	434.3	350.2	216.5	123.9	73.9	57.7	45.8	39.1	27.0	22.6	11.8
1.70V	407.1	332.9	209.0	120.6	71.9	56.4	44.7	38.3	26.7	22.3	11.7
1.75V	379.4	314.3	201.8	116.9	69.7	55.0	43.7	37.4	26.3	22.0	11.5
1.80V	349.4	294.3	194.9	113.1	67.5	53.5	42.6	36.6	26.0	21.7	11.4
1.85V	290.6	247.7	169.5	102.1	62.2	49.6	39.8	34.2	24.4	20.5	10.9

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

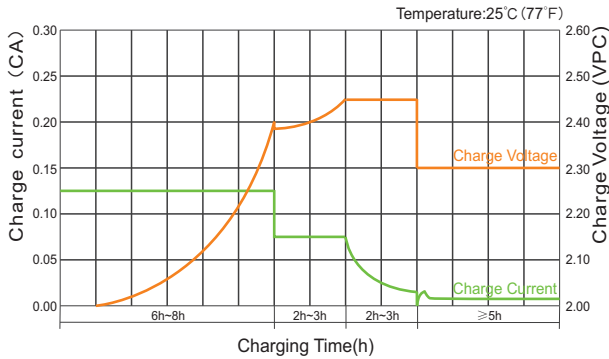
The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.



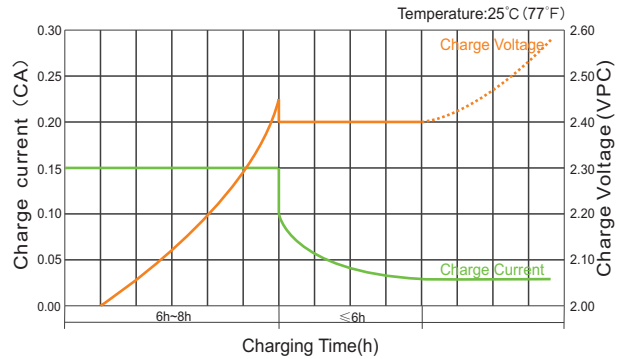
EV12-110(12V110Ah)



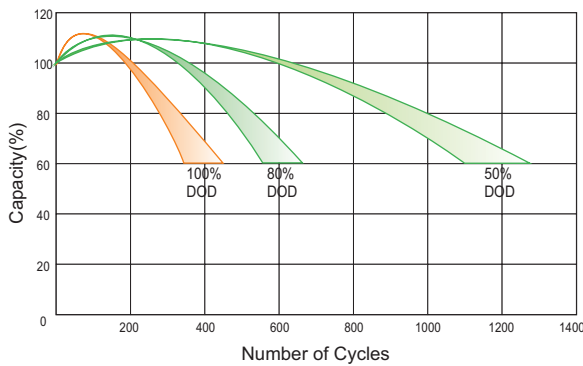
Charge Characteristic Curve for Cycle Use(IUUU)



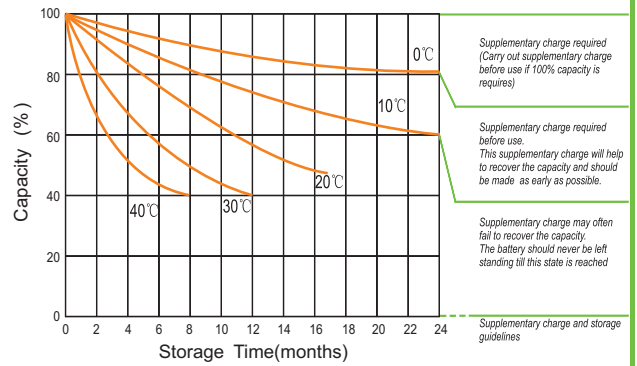
Charge Characteristic Curve For Cycle Use(III)



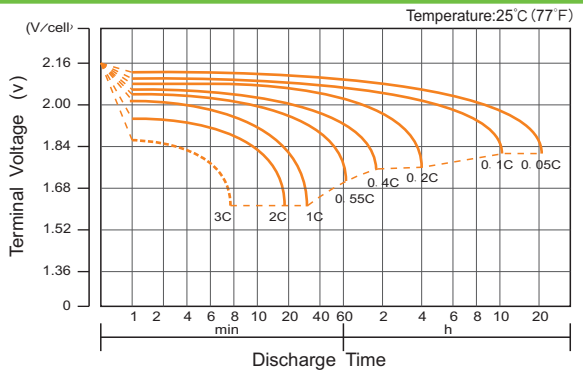
Cycle Life in Relation to Depth of Discharge



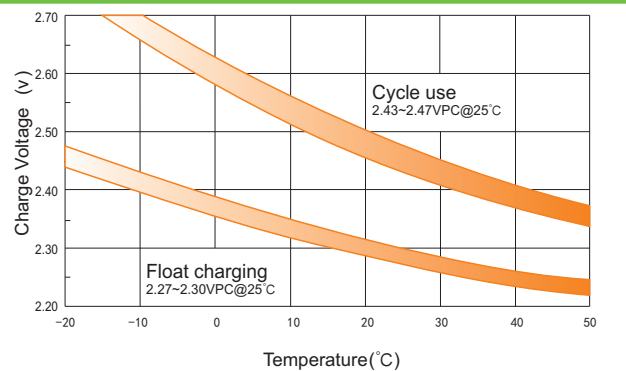
Storage Characteristics



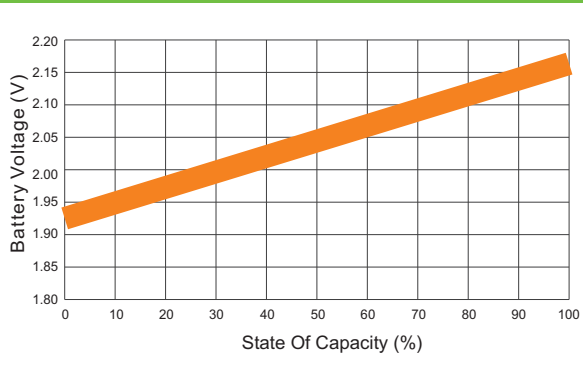
Discharge Characteristics Curve



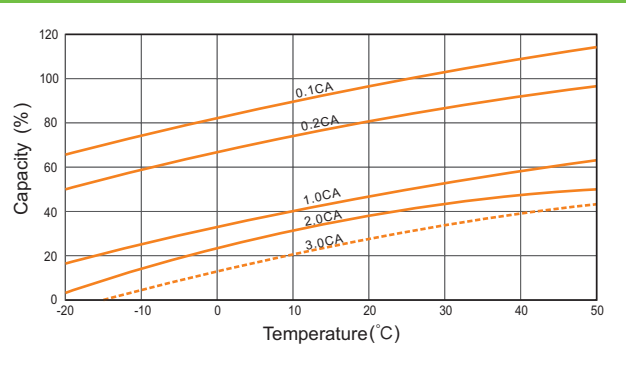
Relationship Between Charging Voltage and Temperature



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



Temperature Effects on Capacity



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