



# EV12-240(12V240Ah)



## Specification

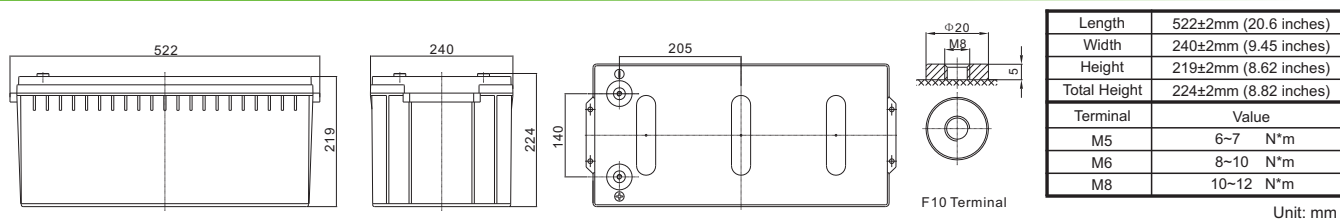
Cells Per Unit	6
Voltage Per Unit	12
Capacity	240Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 65.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 2.8 mΩ
Terminal	F16(M8)/F10(M8)
Max. Discharge Current	2400A (5 sec)
Cold Cranking Ampere(CCA)	840A
Maxi. Charging Current	72.0A
Reference Capacity	C3 186.0AH
	C5 209.5AH
	C10 240.0AH
	C20 254.0AH
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 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.



## Dimensions



### Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	435.4	265.4	148.1	87.5	67.8	53.3	45.3	30.5	25.3	13.2
1.65V	416.3	254.8	143.0	84.7	65.7	51.8	44.1	30.1	25.0	13.0
1.70V	389.9	243.5	138.4	81.9	63.9	50.4	43.0	29.7	24.6	12.9
1.75V	362.8	232.8	133.3	79.0	62.0	49.1	41.9	29.2	24.3	12.7
1.80V	335.0	222.5	128.2	76.2	60.1	47.7	40.8	28.7	24.0	12.6
1.85V	278.0	191.6	115.0	69.8	55.5	44.3	38.1	27.0	22.6	12.0

### Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	761.2	482.0	278.3	165.7	129.4	102.2	87.4	59.5	49.8	26.1
1.65V	738.5	467.6	270.3	161.2	126.0	99.8	85.4	58.9	49.2	25.7
1.70V	702.0	451.5	263.2	156.8	123.1	97.5	83.5	58.2	48.6	25.4
1.75V	662.8	435.9	255.1	152.0	119.9	95.4	81.7	57.5	48.0	25.1
1.80V	620.6	420.9	246.7	147.3	116.7	93.0	79.8	56.6	47.4	24.9
1.85V	522.3	366.1	222.7	135.7	108.3	86.7	74.7	53.3	44.7	23.7

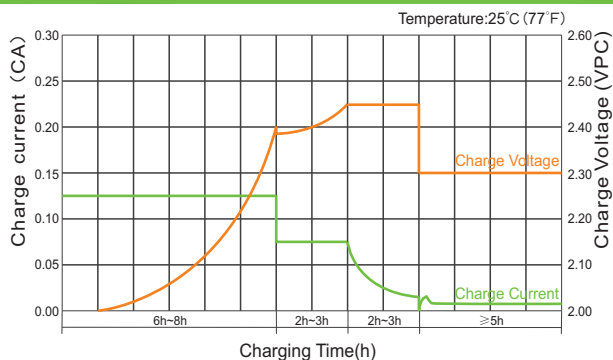
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C<sub>10</sub> should reach 95% after the first cycle and 100% after the third cycle.



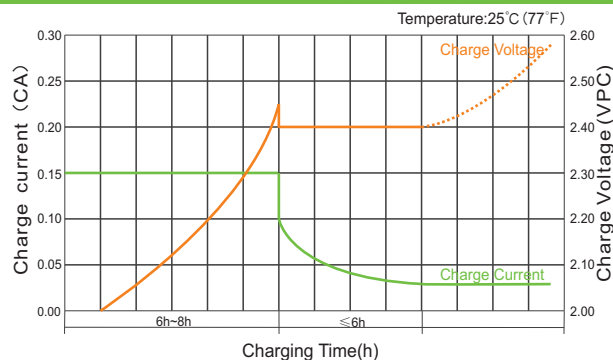
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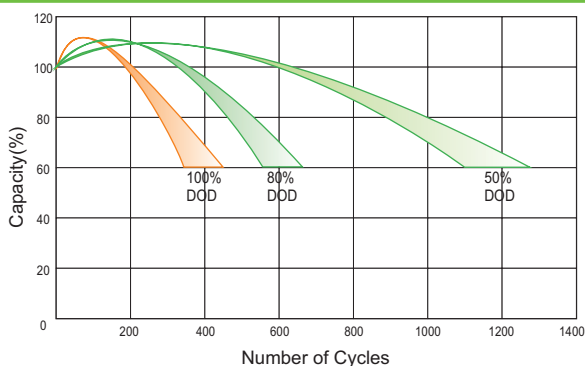
## Charge Characteristic Curve for Cycle Use(IIUU)



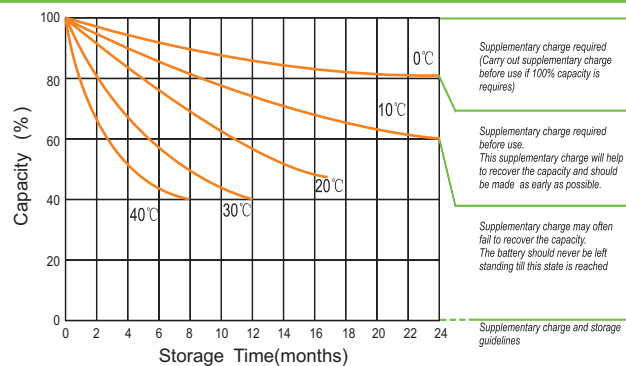
## Charge Characteristic Curve For Cycle Use(III)



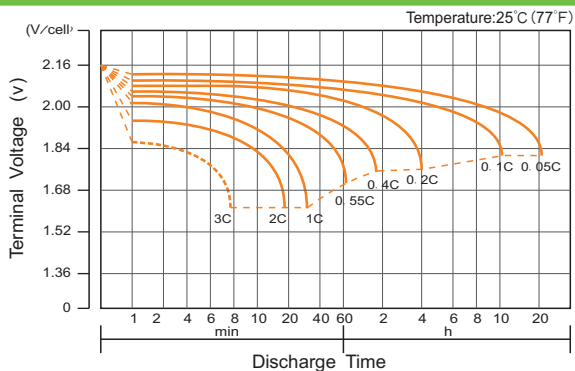
## Cycle Life in Relation to Depth of Discharge



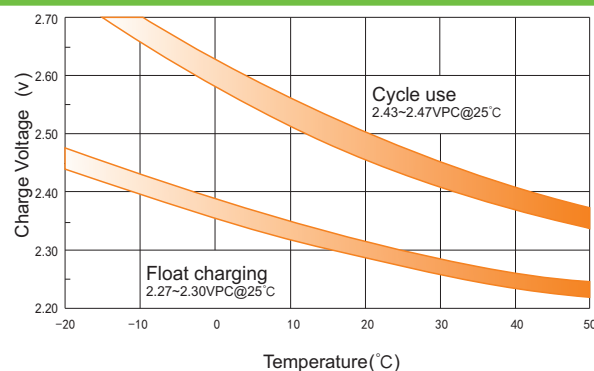
## Storage Characteristics



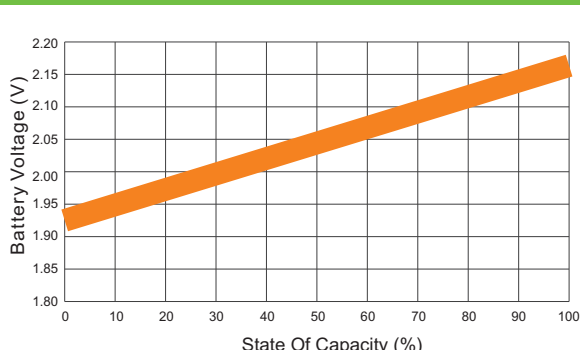
## Discharge Characteristics Curve



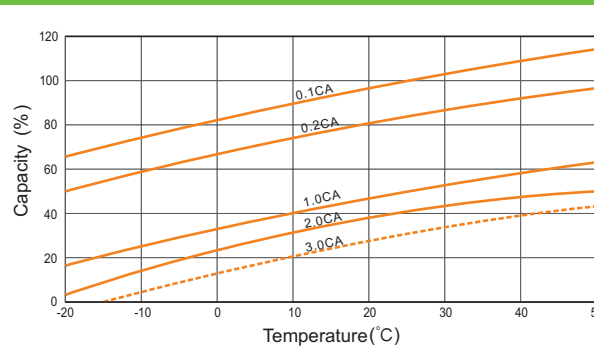
## Relationship Between Charging Voltage and Temperature



## 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.