



EV12-60(12V60Ah)



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	60Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 20.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 6.5 mΩ
Terminal	F15(M6)/F11(M6)
Max. Discharge Current	600A (5 sec)
Cold Cranking Ampere(CCA)	390A
Maxi. Charging Current	18.0A
Reference Capacity	C3 46.5AH
	C5 52.5AH
	C10 60.0AH
	C20 63.6AH
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.



Dimensions

Length	260±2mm (10.2 inches)
Width	169±2mm (6.65 inches)
Height	180±2mm (7.09 inches)
Total Height	185±2mm (7.28 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	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	201.8	152.3	114.6	67.0	37.0	21.9	16.9	13.3	11.3	7.61	6.33	3.31
1.65V	194.5	143.9	109.5	64.3	35.8	21.2	16.4	13.0	11.0	7.53	6.25	3.26
1.70V	185.0	132.5	102.6	61.5	34.6	20.5	16.0	12.6	10.7	7.41	6.16	3.22
1.75V	172.9	121.3	95.5	58.8	33.3	19.8	15.5	12.3	10.5	7.31	6.08	3.18
1.80V	157.5	109.8	88.2	56.2	32.1	19.0	15.0	11.9	10.21	7.19	6.00	3.15
1.85V	138.6	89.7	73.2	48.4	28.7	17.5	13.9	11.1	9.52	6.75	5.65	2.99

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	347.4	258.9	200.3	121.7	69.6	41.4	32.4	25.6	21.8	14.9	12.4	6.52
1.65V	343.7	249.3	194.3	118.1	67.6	40.3	31.5	25.0	21.4	14.7	12.3	6.43
1.70V	330.6	233.8	184.7	114.0	65.8	39.2	30.8	24.4	20.9	14.5	12.1	6.36
1.75V	314.4	217.8	174.4	110.1	63.8	38.0	30.0	23.8	20.4	14.4	12.0	6.29
1.80V	291.5	200.6	163.3	106.3	61.7	36.8	29.2	23.2	20.0	14.2	11.9	6.23
1.85V	261.0	166.9	137.5	92.4	55.7	33.9	27.1	21.7	18.7	13.3	11.2	5.92

(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.



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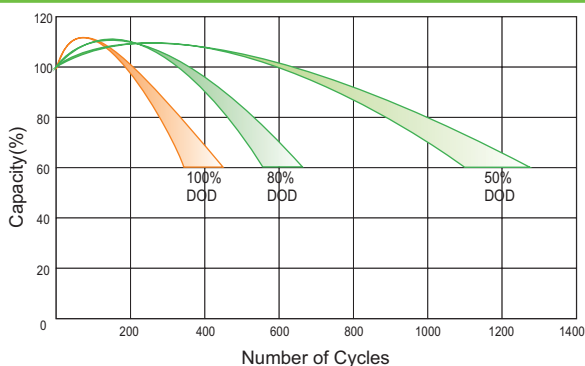
Charge Characteristic Curve for Cycle Use(IUUU)



Charge Characteristic Curve For Cycle Use(III)



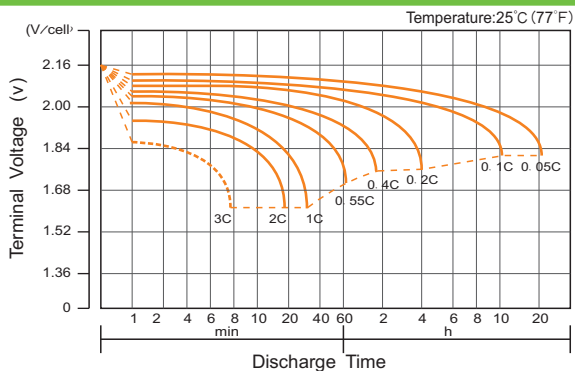
Cycle Life in Relation to Depth of Discharge



Storage Characteristics



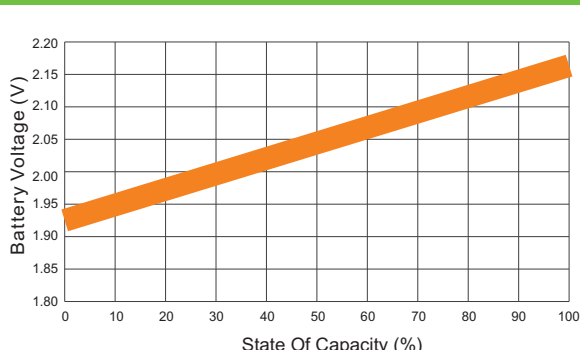
Discharge Characteristics Curve



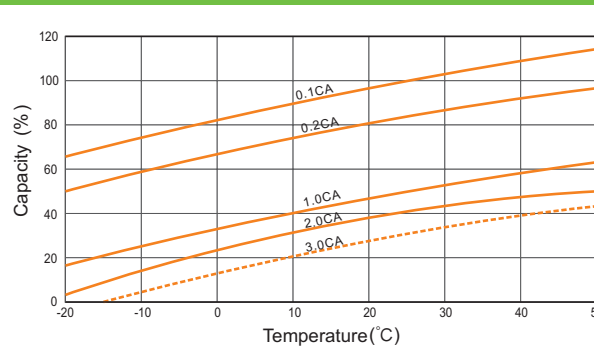
Relationship Between Charging Voltage and Temperature



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.