



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%)
Internal Resistance	Approx. 6.5 mΩ
Terminal	F11 (M6)/F15 (M6)
Max. Discharge Current	600A (5 sec)
Cold Cranking Ampere(CCA)	390A
Maximum Charging Current	18.0 A
Reference Capacity	C3 46.2AH
	C5 51.0AH
	C10 60.0AH
	C20 64.2AH
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. Suitable for Electric Vehicle and Golf cart; Industrial equipment, Floor Machines, Forklifts, Aerial lifts, and Robotics; Marine, RV, and no-idle solutions; Mobility and Medical Equipment; and most outdoor application.



Dimensions

F11 TERMINAL A-TERMINAL ADAPTER

Length	260±1mm (10.2 inches)
Width	169±1mm (6.65 inches)
Height	180±1mm (7.09 inches)
Total Height	185±1mm (7.28 inches)
Terminal	Value
M5	6~7 N+m
M6	8~10 N+m
M8	10~12 N+m

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	157.9	117.6	67.6	39.1	23.1	16.5	12.9	10.8	7.60	6.44	3.34
1.65V	152.6	114.1	66.2	38.3	22.7	16.2	12.7	10.6	7.52	6.38	3.31
1.70V	145.8	109.5	64.3	37.3	22.2	15.9	12.5	10.4	7.40	6.29	3.27
1.75V	136.6	103.2	61.8	36.0	21.5	15.4	12.2	10.2	7.25	6.17	3.21
1.80V	124.3	94.9	58.3	34.2	20.5	14.8	11.7	9.86	7.03	6.00	3.13
1.85V	107.5	83.4	53.3	31.6	19.1	13.9	11.0	9.37	6.71	5.76	3.02

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	268	206	123	73.0	43.8	31.5	24.8	20.7	14.8	12.7	6.57
1.65V	266	204	122	72.4	43.4	31.2	24.5	20.6	14.7	12.6	6.53
1.70V	257	197	119	70.8	42.5	30.6	24.1	20.3	14.5	12.4	6.45
1.75V	245	189	116	68.6	41.3	29.9	23.6	19.9	14.2	12.2	6.35
1.80V	227	176	110	65.4	39.6	28.8	22.8	19.3	13.8	11.9	6.20
1.85V	200	157	102	60.9	37.1	27.1	21.6	18.4	13.3	11.4	5.98

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



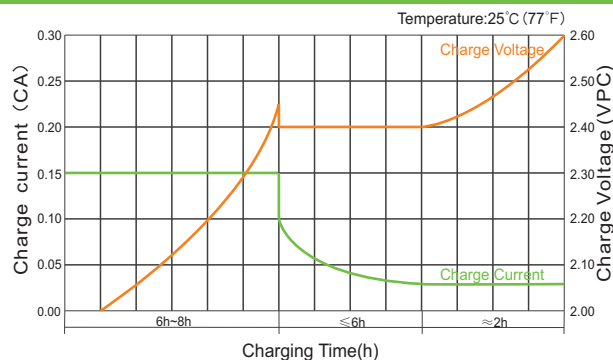
EV12-60(12V60Ah)



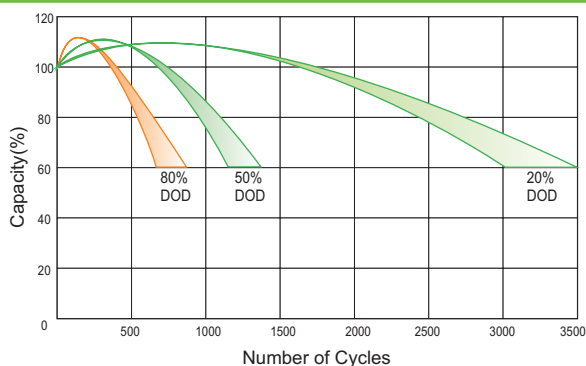
Charge Characteristic Curve for Cycle Use(IUUU)



Charge Characteristic Curve For Cycle Use(III)



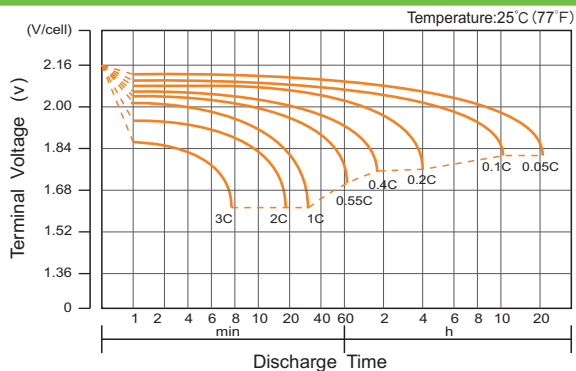
Cycle Life in Relation to Depth of Discharge



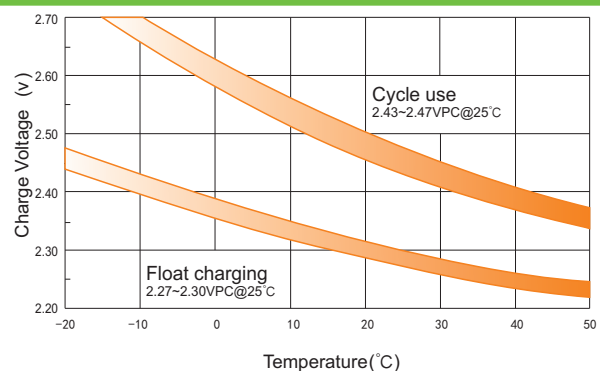
Storage Characteristics



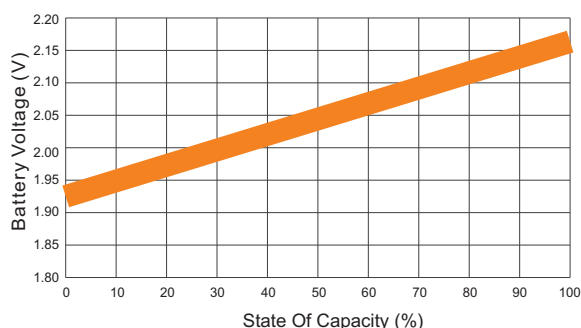
Discharge Characteristics Curve



Relationship Between Charging Voltage and Temperature



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



Temperature Effects on Capacity

