



EV6-310(6V310Ah)



Specification

Cells Per Unit	3
Voltage Per Unit	6V
Capacity	310Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 44.5 Kg (Tolerance ±5%)
Internal Resistance	≤2.0 mΩ (Full Charge Condition @25°C)
Terminal	Default F22(M8), F14(M8) Optional
Max. Discharge Current	3100A (5 sec)
Cold Cranking Ampere(CCA)	930A
Maxi. Charging Current	93.0A
Reference Capacity	C ₃ 232.5Ah C ₅ 263.5Ah C ₁₀ 295.0Ah C ₂₀ 310.0Ah
Float Charging Voltage	6.80 V~6.90 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	7.30 V~7.40 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.



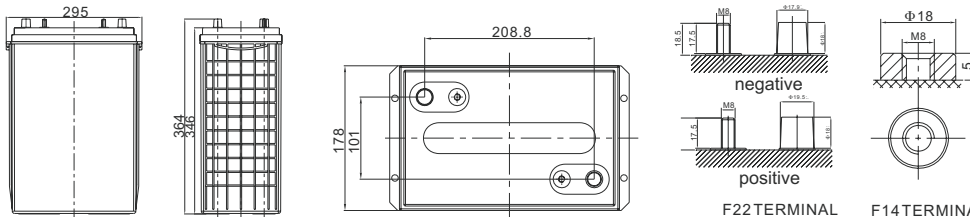
EV (Electric Vehicle) series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids and thick plate construction, the EV series battery offers reliable performance in high load situations and could provide competitive cycle performance. 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 ISO 45001



Dimensions



Length	295±2mm (11.6 inches)
Width	178±2mm (7.01 inches)
Height	346±2mm (13.6 inches)
Total Height	364±2mm (14.3 inches)
Terminal	Value
M5	6~7 N•m
M6	8~10 N•m
M8	10~12 N•m

Unit: mm
If F22 terminal is selected, terminal torque :AP is 5.6~7.9 N•m / M8 Stud is 6.6~8.5 N•m

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	329.0	189.4	112.3	87.4	68.7	58.5	38.4	31.1	16.1
1.65V	315.8	182.9	108.7	84.7	66.8	57.0	38.0	30.7	15.9
1.70V	301.9	177.0	105.2	82.4	65.0	55.5	37.4	30.2	15.7
1.75V	288.5	170.5	101.5	80.0	63.4	54.1	36.9	29.8	15.5
1.80V	275.8	164.0	97.9	77.5	61.5	52.7	36.3	29.5	15.3
1.85V	237.5	147.1	89.7	71.6	57.2	49.1	34.1	27.7	14.6

Constant Power Discharge Characteristics : W/Cell(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	597.5	355.9	212.9	167.0	131.9	112.7	75.1	61.1	31.8
1.65V	579.6	345.7	207.1	162.5	128.8	110.2	74.4	60.4	31.3
1.70V	559.6	336.5	201.4	158.8	125.8	107.7	73.4	59.6	31.0
1.75V	540.3	326.2	195.3	154.7	123.0	105.4	72.5	58.9	30.6
1.80V	521.7	315.6	189.2	150.5	119.9	103.0	71.4	58.2	30.4
1.85V	453.8	284.8	174.3	139.8	111.9	96.4	67.2	54.9	28.9

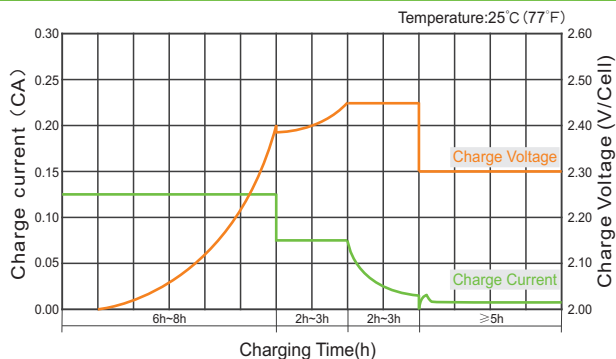
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.
The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.
If F22 terminal is selected and the discharge current is more than 0.25C, the threaded terminal of terminal F22 shall not be used in connection, but the lead pole shall be connected.



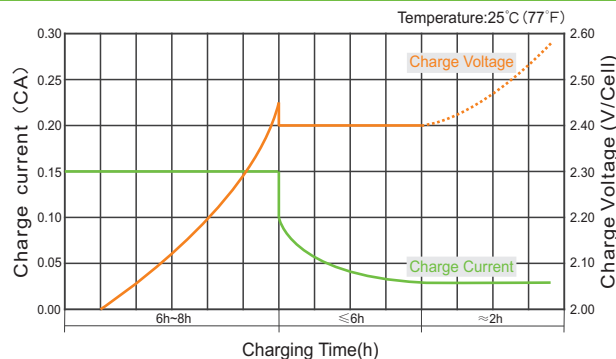
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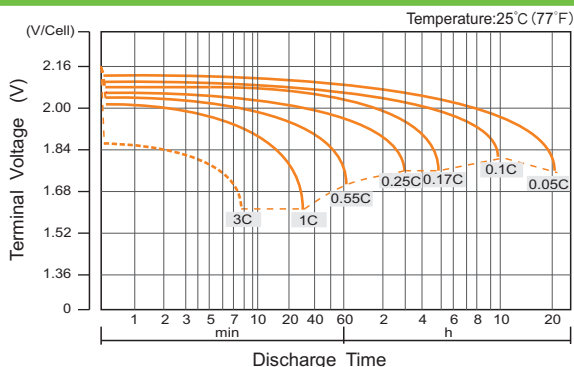
Charge Characteristic Curve for Cycle Use(IIUU)



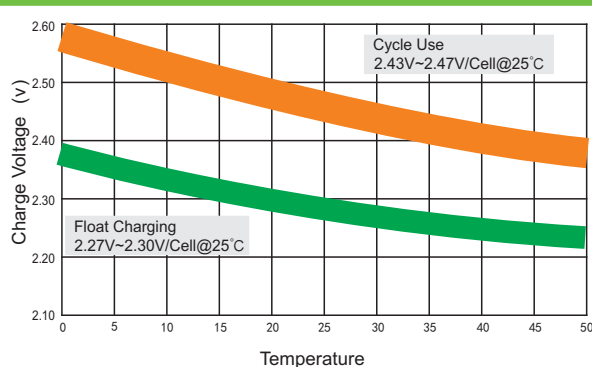
Charge Characteristic Curve For Cycle Use(III)



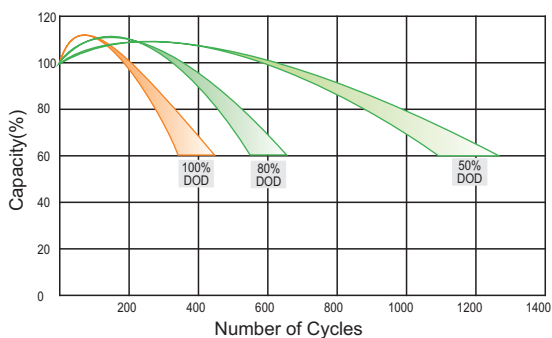
Discharge Characteristics Curve



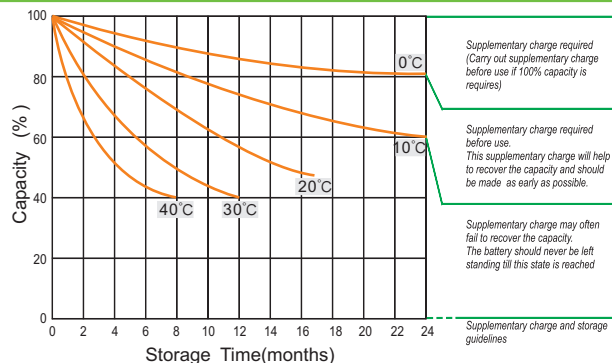
Relationship Between Charging Voltage and Temperature



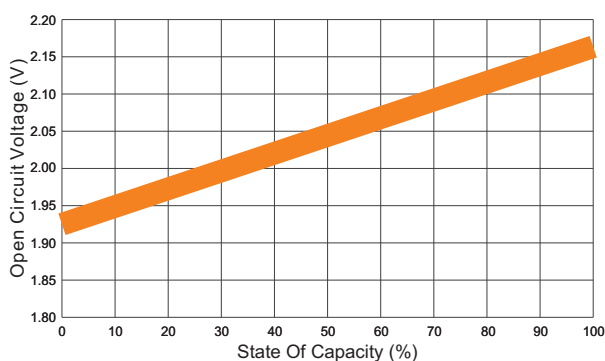
Cycle Life in Relation to Depth of Discharge



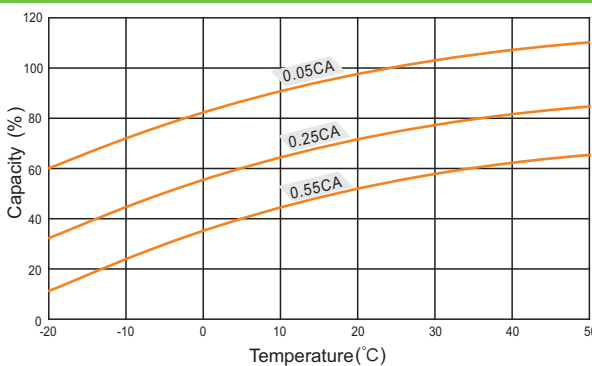
Storage Characteristics



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.