



# EV8-200(8V200Ah)



## Specification

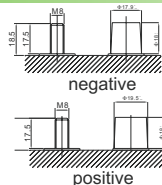
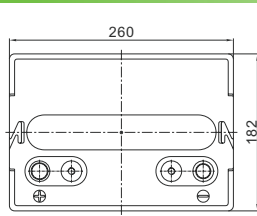
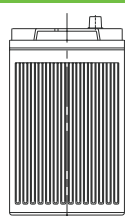
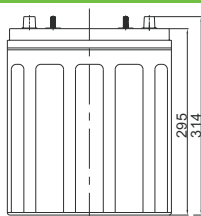
Cells Per Unit	4
Voltage Per Unit	8
Capacity	200Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 38.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 3.0 mΩ
Terminal	F14(M8)/F22(M8)
Max. Discharge Current	2000A (5 sec)
Cold Cranking Ampere(CCA)	700A
Maxi. Charging Current	60.0A
Reference Capacity	C3 153.3AH
	C5 174.5AH
	C10 200.0AH
	C20 212.0AH
Float Charging Voltage	9.07 V~9.20 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	9.73 V~9.87 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.



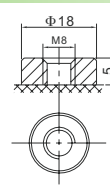
EV ( Electric Vehicle ) series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids and thick plate construction, the EV series battery offers reliable performance in high load situations and could provide competitive cycle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



F22 TERMINAL



F14 TERMINAL

Length	260±2mm (10.2 inches)
Width	182±2mm (7.17 inches)
Height	295±2mm (11.6 inches)
Total Height	314±2mm (12.4 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	454.4	360.9	220.0	123.4	72.9	56.5	44.4	37.8	25.4	21.1	11.0
1.65V	429.3	345.1	211.3	115.6	69.8	54.2	42.7	36.8	25.1	20.8	10.9
1.70V	395.3	323.2	201.9	111.9	67.5	52.7	41.6	35.8	24.7	20.5	10.7
1.75V	361.8	300.8	193.0	107.8	65.2	51.1	40.5	34.9	24.4	20.3	10.6
1.80V	327.5	277.7	184.5	103.6	62.9	49.6	39.4	34.0	24.0	20.0	10.5
1.85V	267.7	230.4	158.9	93.0	57.6	45.8	36.6	31.7	22.5	18.8	10.0

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	772.3	631.0	399.7	231.9	138.1	107.9	85.2	72.8	49.6	41.5	21.7
1.65V	743.9	612.2	387.7	218.5	133.0	103.9	82.4	71.2	49.1	41.0	21.4
1.70V	697.4	581.9	374.3	212.7	129.3	101.5	80.4	69.6	48.5	40.5	21.2
1.75V	649.9	549.4	361.5	206.2	125.4	98.9	78.7	68.1	47.9	40.0	21.0
1.80V	598.5	514.5	349.0	199.4	121.5	96.2	76.7	66.5	47.2	39.5	20.8
1.85V	497.9	433.0	303.5	180.0	112.0	89.4	71.6	62.3	44.4	37.3	19.7

(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.

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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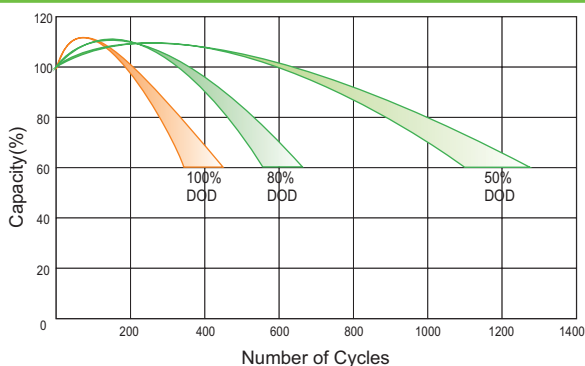
## Charge Characteristic Curve for Cycle Use(IIUU)



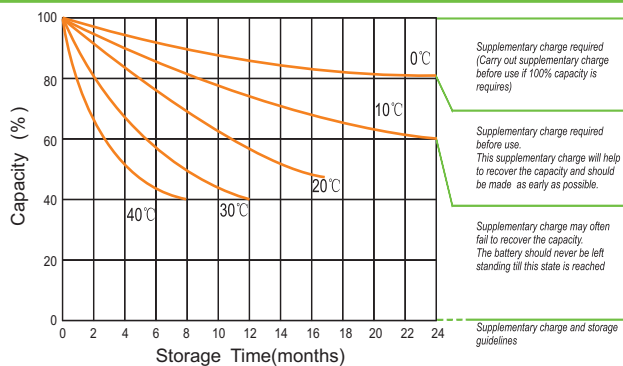
## Charge Characteristic Curve For Cycle Use(III)



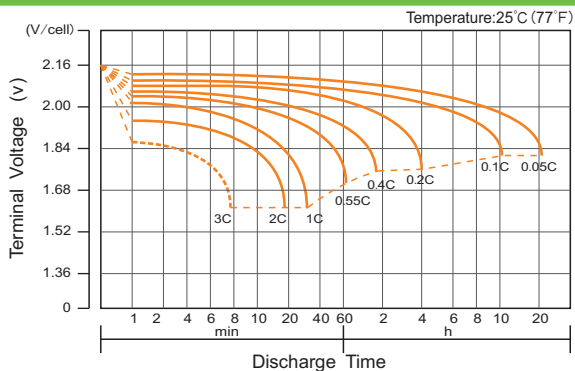
## Cycle Life in Relation to Depth of Discharge



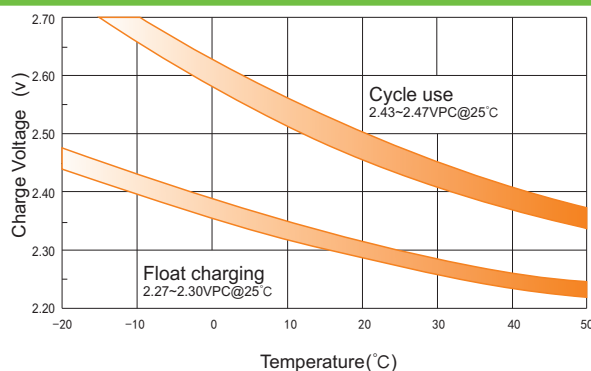
## Storage Characteristics



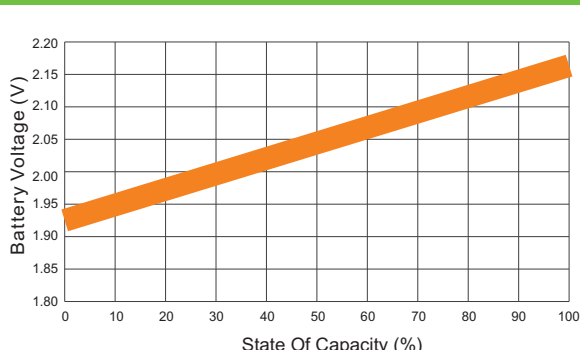
## Discharge Characteristics Curve



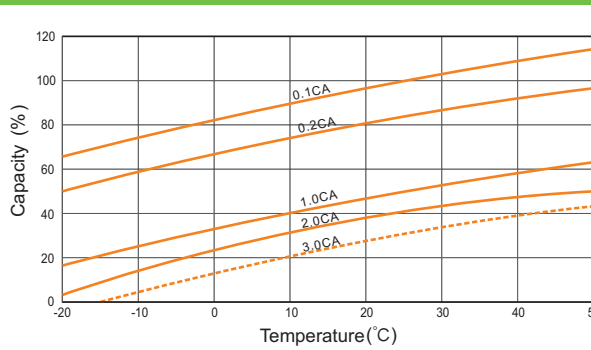
## Relationship Between Charging Voltage and Temperature



## 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.