



EV12-300(12V300Ah)



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	300Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 78.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 3.0 mΩ
Terminal	F14(M8)
Max. Discharge Current	3000A (5 sec)
Cold Cranking Ampere(CCA)	1010A
Maxi. Charging Current	90.0A
Reference Capacity	C3 219.3AH
	C5 247.0AH
	C10 283.0AH
	C20 300.0AH
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.



ISO 9001



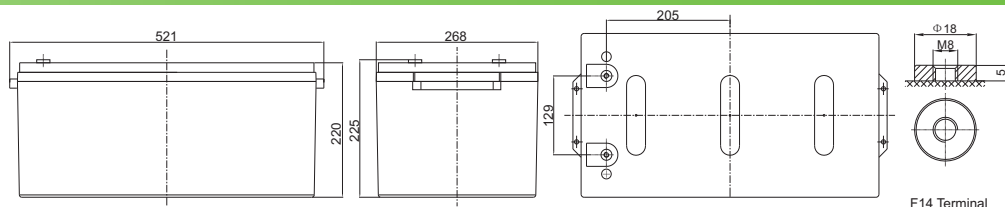
ISO 14001



OHSAS 18001



Dimensions



Length	521±2mm (20.5 inches)
Width	268±2mm (10.6 inches)
Height	220±2mm (8.66 inches)
Total Height	225±2mm (8.86 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	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	540.6	316.2	174.7	103.1	79.9	62.8	53.5	35.9	29.9	15.6
1.65V	516.8	303.5	168.7	99.9	77.5	61.1	52.1	35.5	29.5	15.4
1.70V	484.1	290.1	163.2	96.6	75.3	59.5	50.7	35.0	29.1	15.2
1.75V	450.4	277.3	157.2	93.2	73.1	57.9	49.4	34.5	28.7	15.0
1.80V	415.9	265.1	151.2	89.9	70.8	56.3	48.2	33.9	28.3	14.9
1.85V	345.1	228.3	135.6	82.3	65.5	52.3	44.9	31.8	26.6	14.1

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	945.0	574.3	328.3	195.5	152.6	120.6	103.0	70.2	58.7	30.8
1.65V	916.9	557.1	318.8	190.2	148.6	117.8	100.7	69.5	58.1	30.3
1.70V	871.6	537.9	310.4	184.9	145.2	115.0	98.5	68.6	57.3	30.0
1.75V	822.9	519.4	300.8	179.3	141.4	112.5	96.3	67.8	56.6	29.7
1.80V	770.6	501.4	291.0	173.7	137.6	109.6	94.2	66.8	55.9	29.4
1.85V	648.5	436.2	262.6	160.1	127.8	102.3	88.1	62.8	52.7	28.0

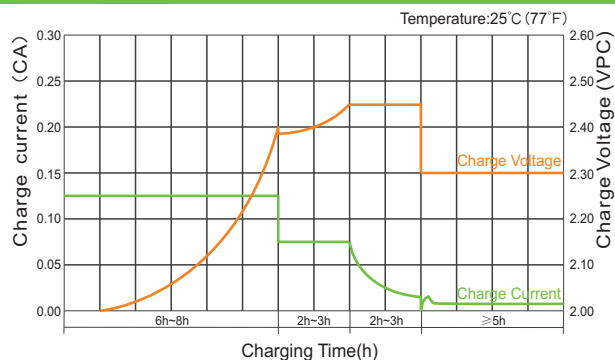
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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.

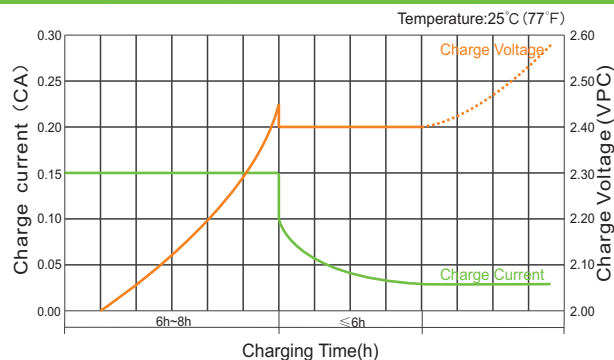
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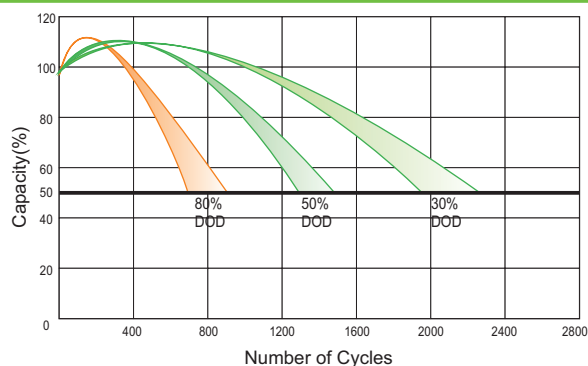
Charge Characteristic Curve for Cycle Use(IUUU)



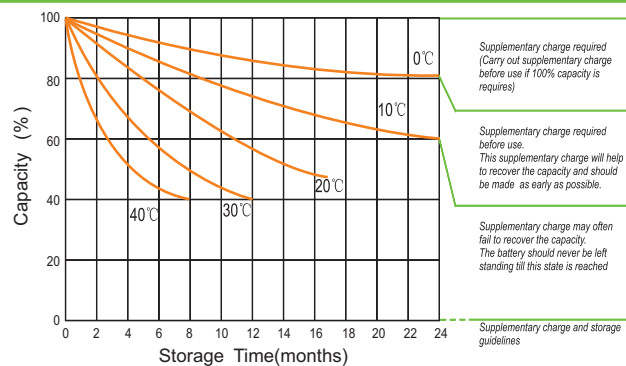
Charge Characteristic Curve For Cycle Use(IUI)



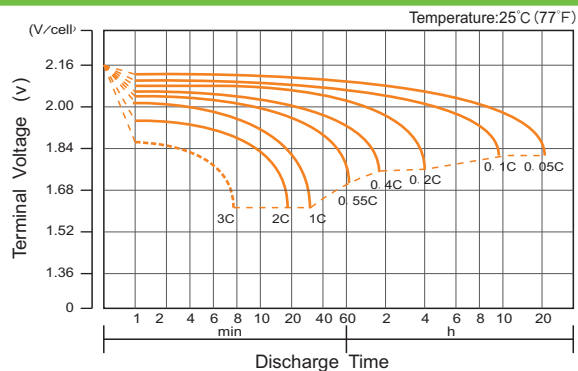
Cycle Life in Relation to Depth of Discharge



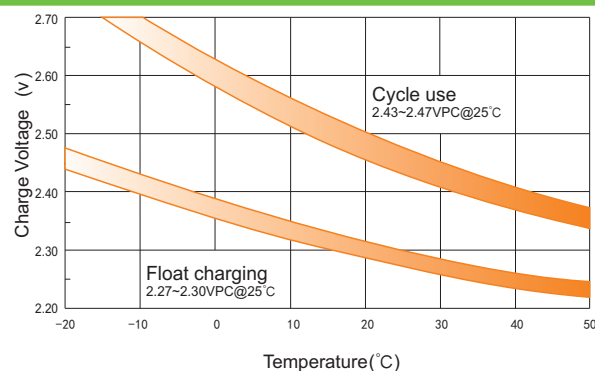
Storage Characteristics



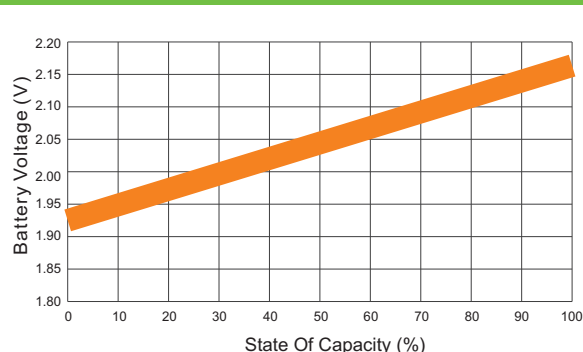
Discharge Characteristics Curve



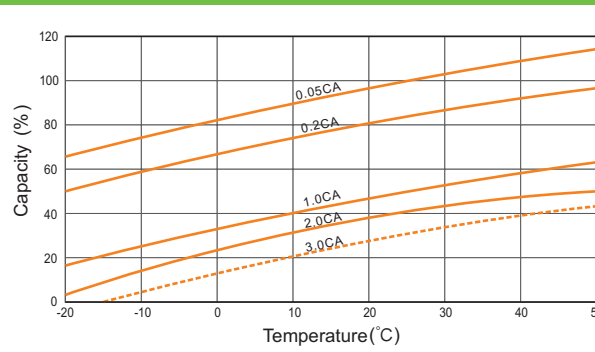
Relationship Between Charging Voltage and Temperature



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.

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