



EV12-12(12V12Ah)



Specification

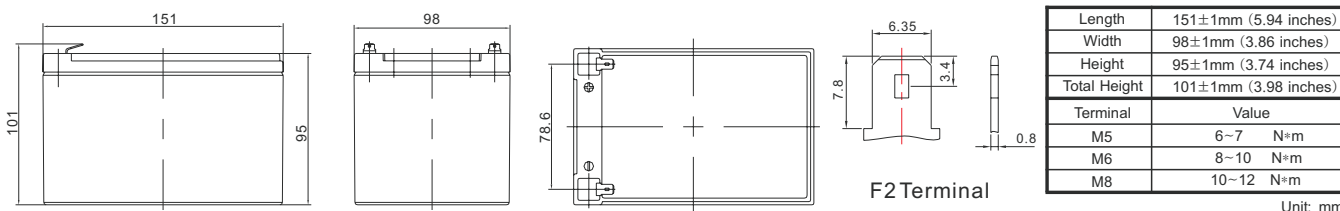
Cells Per Unit	6
Voltage Per Unit	12
Capacity	12Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 4.20 Kg (Tolerance ±5.0%)
Internal Resistance	Approx. 13.0 mΩ
Terminal	F1/F2
Max. Discharge Current	180A (5 sec)
Cold Cranking Ampere(CCA)	120A
Maxi. Charging Current	3.6A
Reference Capacity	C3 9.36AH
	C5 10.3AH
	C10 11.3AH
	C20 12.0AH
Float Charging Voltage	13.7 V~13.9 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



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	50.17	32.89	24.50	14.08	8.267	4.716	3.331	2.605	2.174	1.469	1.215	0.624
1.65V	48.31	31.80	23.77	13.79	8.111	4.636	3.280	2.569	2.147	1.453	1.203	0.618
1.70V	45.90	30.37	22.80	13.40	7.904	4.530	3.212	2.521	2.111	1.431	1.187	0.611
1.75V	42.69	28.45	21.51	12.87	7.622	4.384	3.120	2.455	2.062	1.400	1.164	0.600
1.80V	38.42	25.89	19.77	12.14	7.233	4.183	2.991	2.364	1.993	1.358	1.132	0.586
1.85V	32.65	22.40	17.37	11.10	6.679	3.895	2.805	2.232	1.893	1.297	1.086	0.564

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	85.08	55.91	42.83	25.58	15.46	8.94	6.36	5.00	4.19	2.87	2.39	1.23
1.65V	84.10	55.48	42.42	25.42	15.33	8.85	6.30	4.96	4.16	2.85	2.37	1.22
1.70V	80.79	53.58	41.06	24.84	14.99	8.67	6.19	4.88	4.10	2.81	2.34	1.21
1.75V	76.49	51.11	39.29	24.10	14.52	8.43	6.04	4.77	4.02	2.75	2.30	1.19
1.80V	70.04	47.32	36.62	22.96	13.85	8.09	5.81	4.61	3.90	2.68	2.24	1.16
1.85V	60.59	41.66	32.63	21.22	12.88	7.57	5.47	4.37	3.71	2.56	2.15	1.12

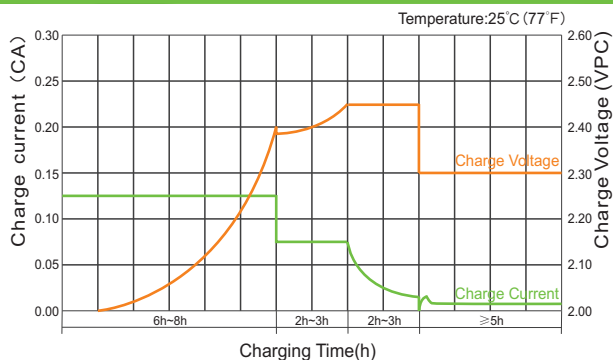
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.



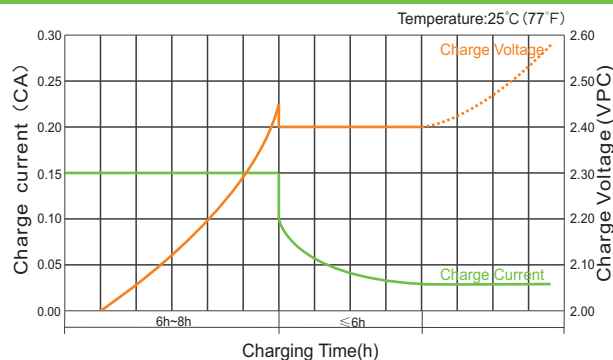
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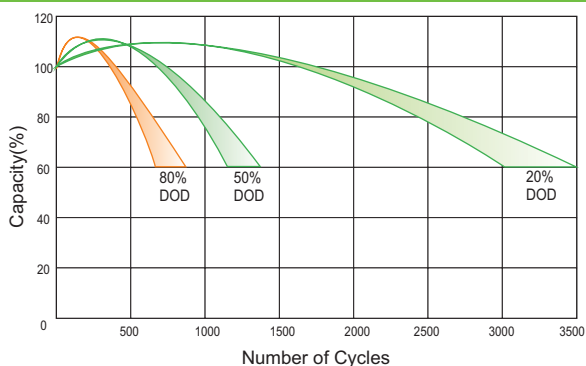
Charge Characteristic Curve for Cycle Use(IUUU)



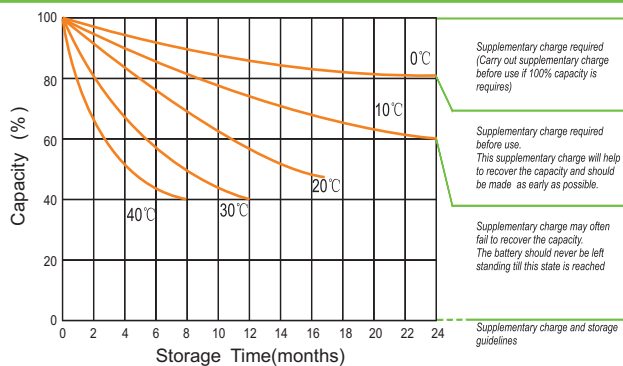
Charge Characteristic Curve For Cycle Use(III)



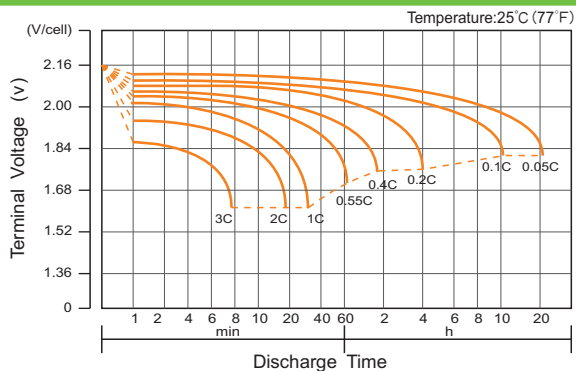
Cycle Life in Relation to Depth of Discharge



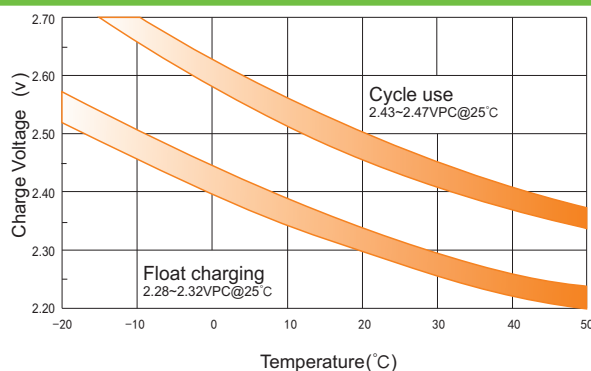
Storage Characteristics



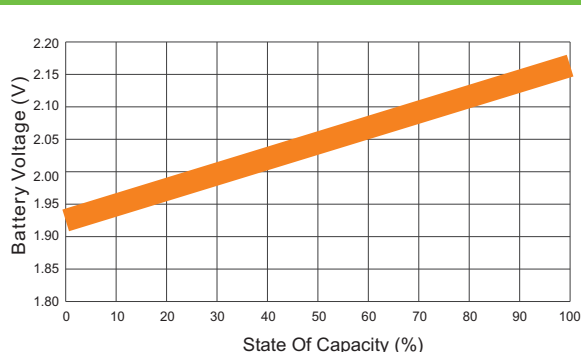
Discharge Characteristics Curve



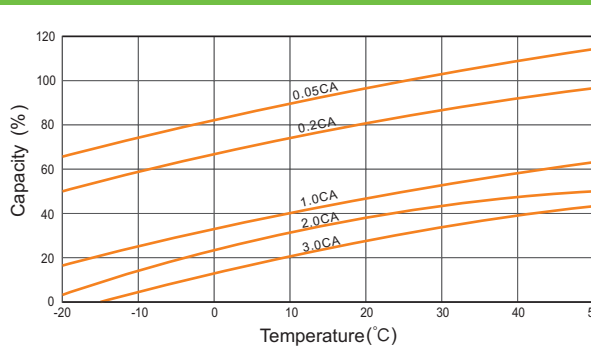
Relationship Between Charging Voltage and Temperature



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.