EV12-45(12V45Ah)

RITAR®

Specification

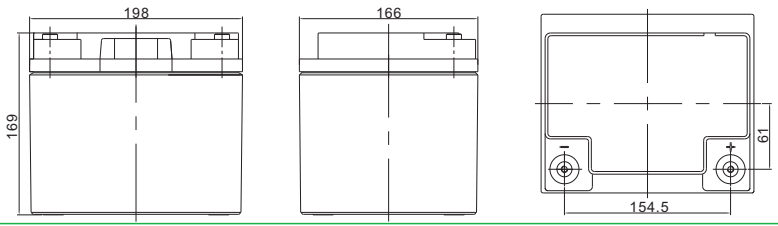
Cells Per Unit	6
Voltage Per Unit	12
Capacity	45Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 14.6 Kg (Tolerance±3%)
Internal Resistance	Approx. 7 mΩ
Terminal	F11(M6)/F4(M5)
Max. Discharge Current	450A (5 sec)
Cold Cranking Ampere(CCA)	315A
Maximum Charging Current	13.5 A
Reference Capacity	C3 35.2AH C5 40.0AH C10 42.8AH C20 45.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

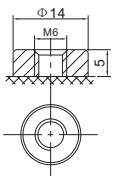
EV（Electric Vehicle）series is specially designed for frequent discharge deep cycle application.By using the specially designed active material,strong grids and thick plate construction,the EV series battery offers reliable performance in high load situations and could provide competitive cycle performance.Suitable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

ISO 9001 ISO 14001 OHSAS 18001

MH 28539 G4M20206-0910-E-16

Dimensions





F11 TERMINAL

Length	198±2mm (7.80 inches)
Width	166±2mm (6.54 inches)
Height	169±2mm (6.65 inches)
Total Height	169±2mm (6.65 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℃)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	48.17	27.83	16.47	12.53	9.86	8.35	5.53	4.59	2.34
1.65V	47.16	27.31	16.19	12.34	9.73	8.24	5.47	4.54	2.32
1.70V	45.82	26.61	15.81	12.08	9.55	8.10	5.39	4.48	2.29
1.75V	44.00	25.66	15.31	11.74	9.30	7.91	5.27	4.40	2.25
1.80V	41.51	24.35	14.60	11.25	8.95	7.65	5.11	4.28	2.20
1.85V	37.98	22.49	13.60	10.55	8.45	7.26	4.88	4.10	2.11

Constant Power Discharge Characteristics : WPC(25℃)

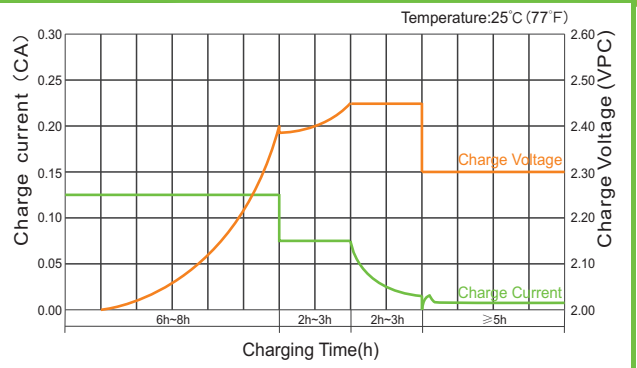
F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	87.5	52.0	31.2	23.9	18.9	16.1	10.8	9.02	4.60
1.65V	86.9	51.6	30.9	23.7	18.8	16.0	10.7	8.95	4.57
1.70V	84.9	50.5	30.3	23.3	18.5	15.7	10.6	8.83	4.52
1.75V	82.4	48.9	29.4	22.7	18.1	15.4	10.4	8.67	4.45
1.80V	78.5	46.6	28.2	21.9	17.4	15.0	10.1	8.45	4.34
1.85V	72.6	43.4	26.4	20.6	16.5	14.3	9.64	8.12	4.19

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

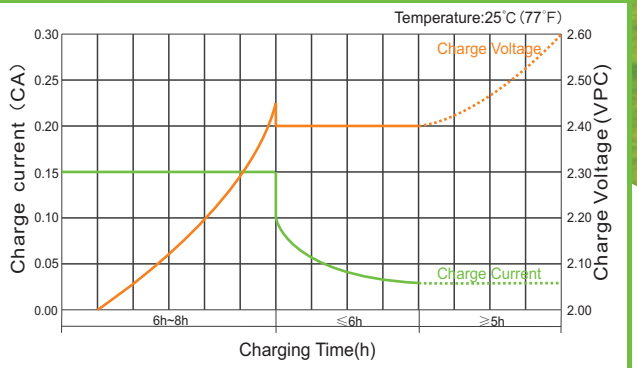
EV12-45(12V45Ah)

RITAR®

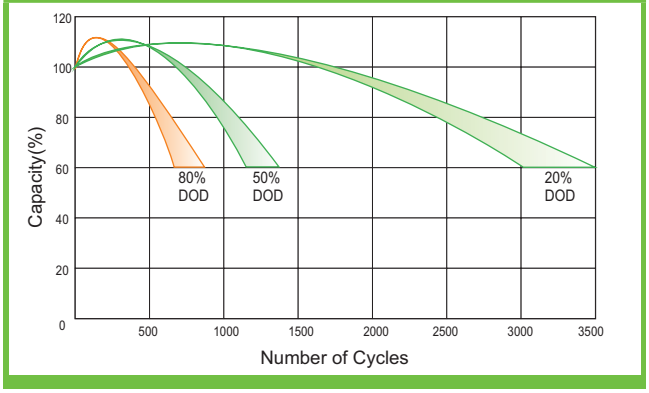
Charge Characteristic Curve for Cycle Use(IIUU)



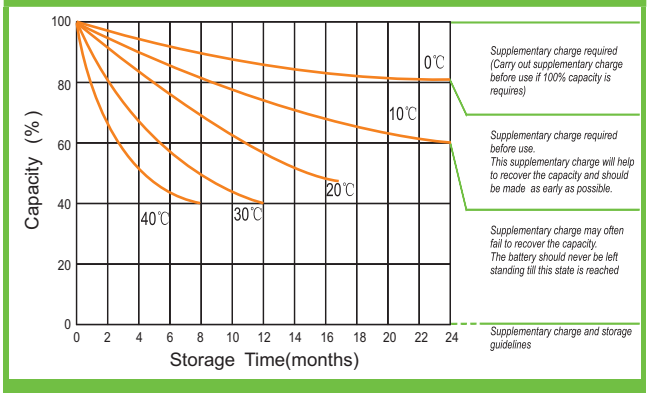
Charge Characteristic Curve For Cycle Use(IUI)



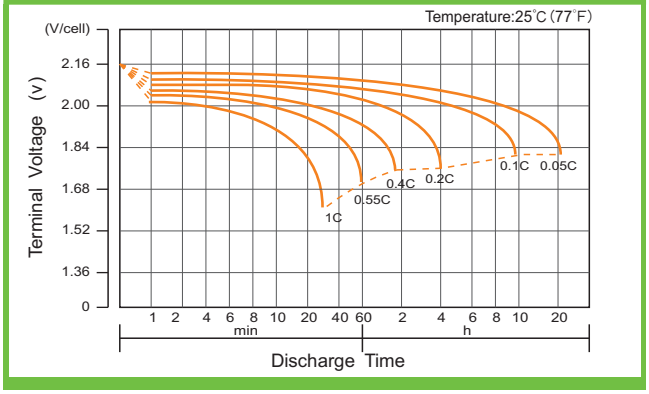
Cycle Life in Relation to Depth of Discharge



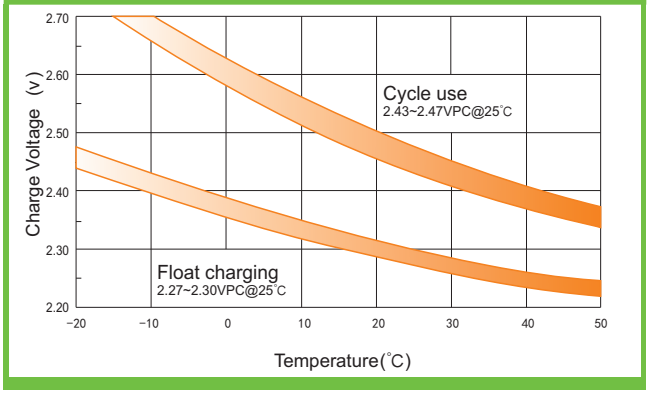
Storage Characteristics



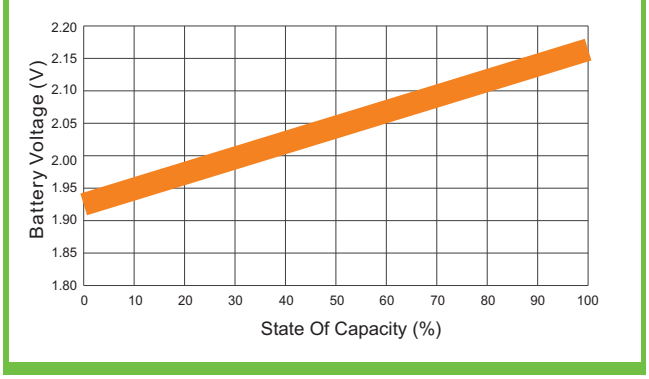
Discharge Characteristics Curve



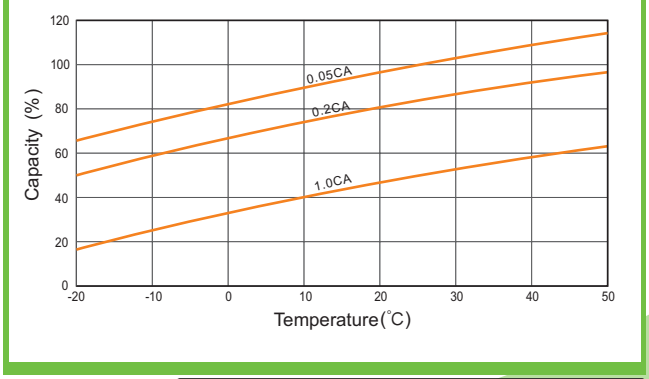
Relationship Between Charging Voltage and Temperature



Relationship of OCV And State of Charge(20℃)



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.

For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:
Moore & Moore Solutions, Inc.
Phone: 484-302-7009
Email: mr@mooreu.com
www.MooreU.com