EV6-200 (6V200Ah)

EV (Electric Vehicle) series is specially designed for frequent deep cycle discharge. By using the specially designed active material and strong grids, the EV series battery offers reliable performance in high load situations and can deliver more than 300 cycles at 100% DOD. Suitable for mobility scooters, electric wheel chairs, golf buggies etc.

RITAR®

Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	200Ah@10hr-rate to 1.80V per cell @25℃
Weight	Approx. 30.0 Kg(Tolerance ±2%)
Max. Discharge Current	2000A (5 sec)
Internal Resistance	Approx. 2.4 mΩ
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Float charging Voltage	6.8 to 6.9 VDC/unit Average at 25℃
Recommended Maximum Charging Current Limit	60 A
Equalization and Cycle Service	7.3 to 7.4 VDC/unit Average at 25℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25℃. Self-discharge ratio less than 3% per month at 25℃. Please charge batteries before using.
Terminal	Terminal F12
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

MH28539

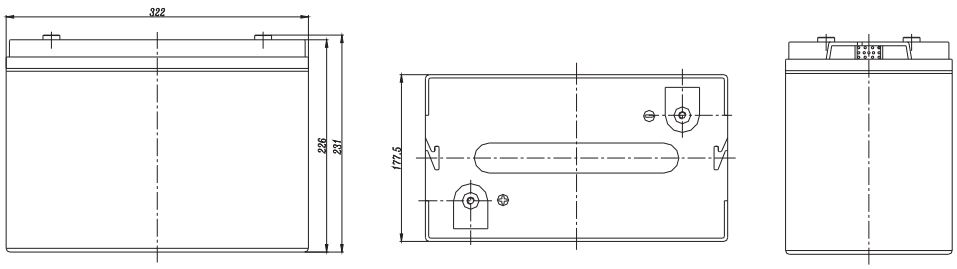
G4M20206-0910-E-16

IQNet CERTIFICATE Postcode.:421001 is in conformity with ISO 14001:2004 Standard

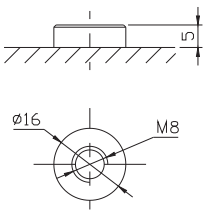
IQNet CERTIFICATE Postcode.:421001 is in conformity with OHSAS 18001:1999 Standard

Dimensions

Unit: mm Dimension: 322(L) ×178(W) ×231(H)



Terminal F12



Constant Current Discharge Characteristics: A (25℃)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	715.0	526.4	388.5	227.4	130.0	79.30	53.49	44.47	35.44	25.57	20.81	11.02
5.00V	694.4	500.9	380.5	223.4	127.4	78.70	53.08	44.26	35.22	25.37	20.61	10.81
5.10V	673.8	483.2	374.5	219.3	124.2	78.11	52.08	44.06	35.00	25.16	20.40	10.61
5.25V	605.0	445.9	356.6	217.6	121.6	77.51	50.86	43.65	34.56	24.95	20.20	10.40
5.40V	546.1	406.6	328.7	213.9	118.0	76.12	50.02	42.62	34.30	24.53	20.02	10.30
5.55V	466.3	363.4	294.8	200.3	113.8	72.74	49.16	40.56	33.44	23.50	19.78	9.88

Constant Power Discharge Characteristics: W(25℃)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	3772	2831	2149	1301	751.1	470.7	318.0	265.0	212.3	152.7	124.8	67.85
5.00V	3697	2745	2115	1285	749.3	469.1	316.7	264.7	210.7	151.9	124.1	66.67
5.10V	3655	2672	2099	1274	743.5	466.3	311.8	264.1	210.0	151.0	123.0	65.44
5.25V	3328	2488	2034	1280	728.8	464.9	304.9	261.7	208.0	149.7	121.7	64.21
5.40V	3031	2294	1880	1259	708.2	457.9	301.2	255.7	205.8	147.2	120.5	62.97
5.55V	2662	2094	1726	1186	683.3	438.2	296.1	243.4	201.0	141.0	119.0	61.17

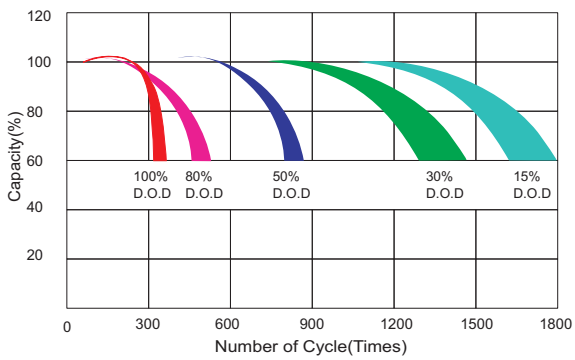
All mentioned values are average values (Tolerance ±2%).

EV6-200

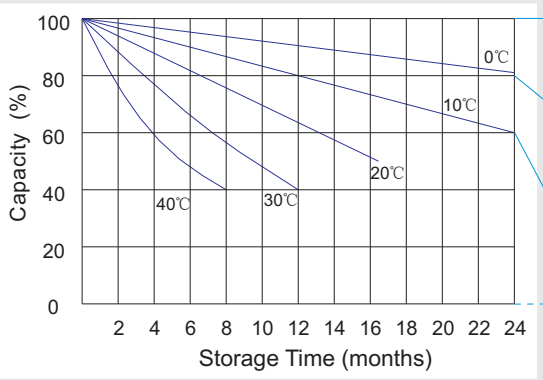
6V200Ah

RITAR®

Life characteristics of cyclic use



Storage characteristic



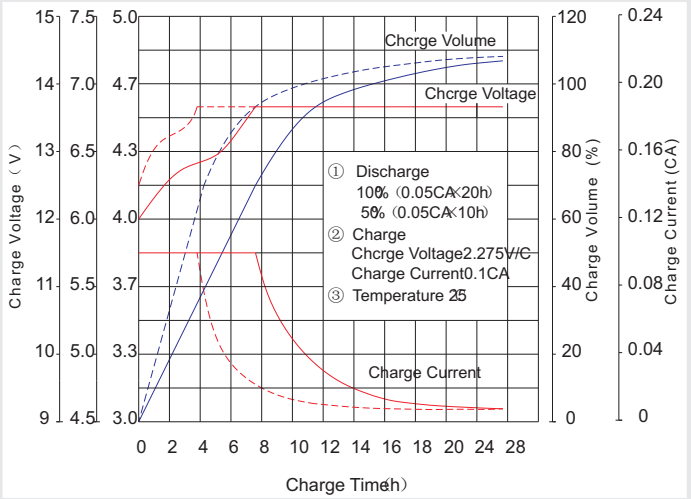
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

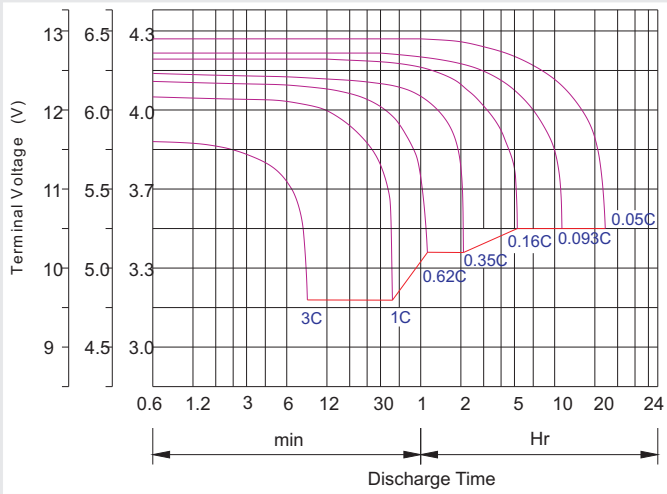
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge C urrent V S. Discharge V oltage

Final D ischarge Voltage V /cell	1.75V	1.70V	1.60V
Discharge Current (A)	（A）≤0.2C	0.2C＜（A）＜1.0C	（A）≥1.0C

Charge t he b atteries a t least o nce e very s ix m onths, if they a re s tored a t 25°C.

Charging M ethod:

Constant Vo ltage	-0.2Cx2h+2.4-2.45V/cellx24h,Max. C urrent 0.3C
Constant C urrent	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.3Cx4h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N-m	8~10N-m	10~12N-m

Maintenance & Cautions

Cycle service

※ Avoid battery over discharge, especially battery sereis connection use.

※ Charged with recommend voltage, ensure battery can be full recharged.

In general, recharge capacity should be 1.1-1.15 times discharge capacity.

※ Effect of temperature on cycle charge voltage: -4mV/℃/Cell.

※ There are a number of factors that will affect the length of cyclic service.

The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.

Generally specking, the most important factors is depth of discharge.

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