



RA12-200D (12V200Ah)

RA12-200D is AGM Deep cycle battery with 10 years floating design life, specially designed for frequent cyclic discharge usage. By using strong grid and specific paste plate, it makes battery have 30% more cyclic life time than standby series. It is applicable for solar energy system, golf cart, electric wheelchair, etc..



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx. 62.5 Kg
Max. Discharge Current	2000 A (5 sec)
Internal Resistance	Approx. 4 mΩ
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
Float charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	60 A
Equalization and Cycle Service	14.4 to 14.7 VDC/unit Average at 25°C
Self Discharge	RITAR batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F12/F16
Container Material	A.B.S. (UL94-HB) , Flammability resistance of UL94-V1 can be available upon request.



MH28539



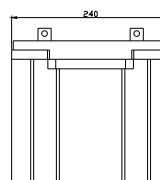
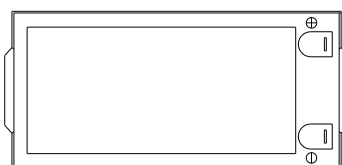
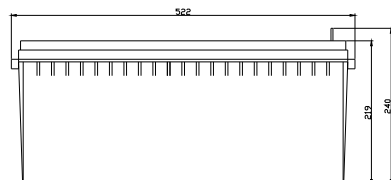
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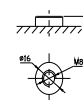
ISO9001:2000 Certificate

Dimensions

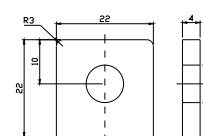
Unit: mm Dimension: 522(L)×240(W)×219(H)



Terminal F12



Terminal F16



Constant Current Discharge Characteristics: A (25°C)

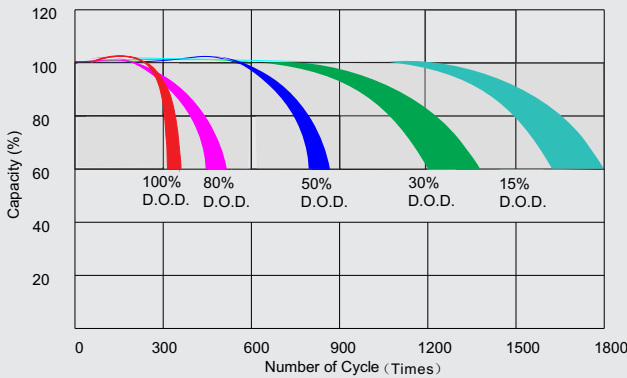
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	689.4	494.0	359.4	220.8	124.8	71.25	50.11	41.47	32.64	23.85	20.17	10.66
10.0V	670.9	470.0	352.1	217.2	124.2	70.71	49.92	41.28	32.45	23.66	19.97	10.47
10.2V	632.2	453.4	346.5	215.2	123.1	70.17	49.54	41.09	32.26	23.46	19.78	10.28
10.5V	567.7	418.4	329.9	209.9	121.9	69.64	49.34	40.70	31.87	23.27	19.58	10.08
10.8V	512.4	381.5	304.1	200.6	119.0	68.39	48.00	39.74	31.30	22.88	19.39	9.889
11.1V	446.1	341.0	272.8	188.0	113.1	65.35	45.89	37.82	29.95	21.91	18.81	9.307

Constant Power Discharge Characteristics: W (25°C)

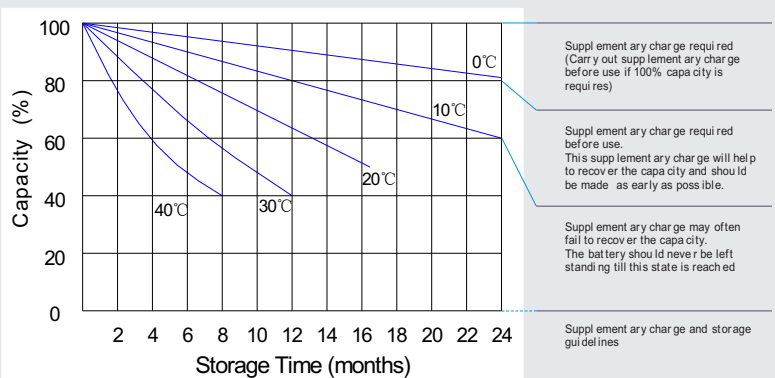
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	6566	4801	3535	2492	1427	819.6	578.3	479.2	377.9	276.8	226.8	119.8
10.0V	6431	4586	3461	2461	1420	816.4	577.2	478.1	375.6	275.6	224.4	118.6
10.2V	6071	4433	3414	2432	1410	808.9	573.7	475.8	374.4	273.3	223.3	117.4
10.5V	5467	4096	3256	2377	1396	801.4	570.2	472.3	370.9	270.9	220.9	116.3
10.8V	4918	3719	2991	2268	1362	789.6	556.4	459.6	365.2	265.1	218.6	115.1
11.1V	4245	3303	2671	2125	1290	753.2	528.8	437.8	346.8	255.8	211.6	110.5

All mentioned values are average values.

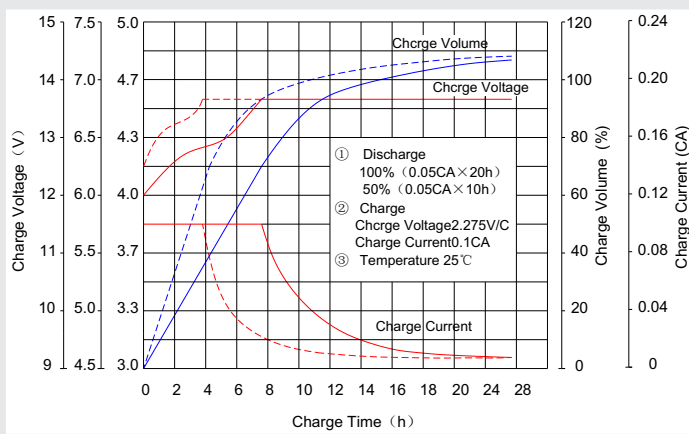
Life characteristics of cyclic use



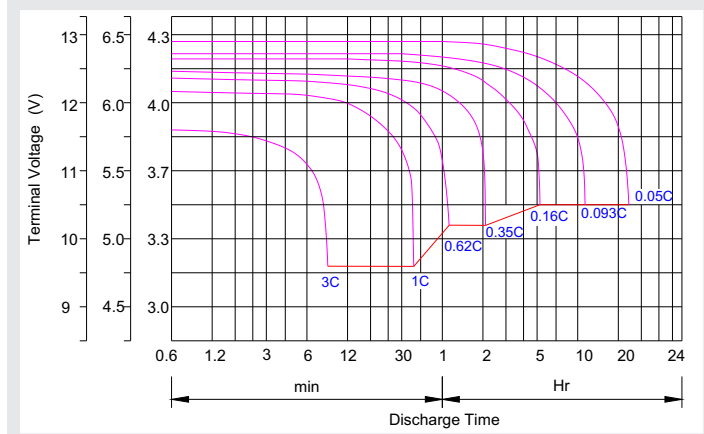
Storage characteristic



Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	2V	50%	70%	74%	80%	88%	98%	100%	102%	104%	105%
	6V&12V	60%	75%	80%	85%	90%	98%	100%	103%	105%	106%
AGM Battery	2V	46%	66%	70%	80%	90%	99%	100%	103%	107%	109%
	6V&12V	55%	70%	76%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

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

Maintenance & Cautions

Cycle service:
※ Avoid battery over discharge, especially battery series 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/°C/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 speaking, the most important factors is depth of discharge .

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h