



EV6-310 (6V310Ah)

EV6-310 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	3
Voltage Per Unit	6
Capacity	310Ah@10hr and 265Ah@5hr -rate to 1.75V per cell @25°C
Weight	Approx. 47 Kg
Max. Discharge Current	3100A (5 sec)
Internal Resistance	Approx. 2.0 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	6.8 to 6.9 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	93 A
Equalization and Cycle Service	7.3 to 7.4 VDC/unit Average at 25°C
Self Discharge	VMF 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 F14/ double terminals
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



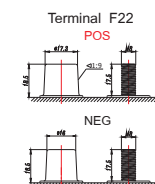
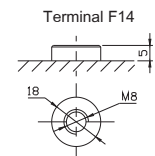
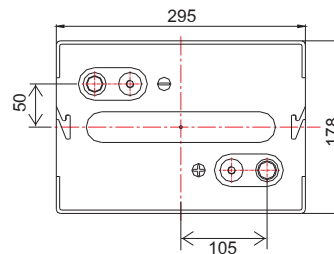
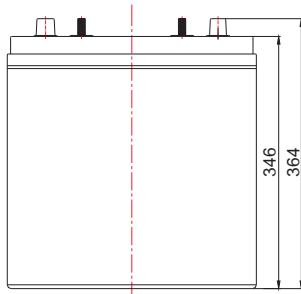
G4M20206-0910-E-16



ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 295(L) × 178(W) × 364(H)



Constant Current Discharge Characteristics: A (25°C)

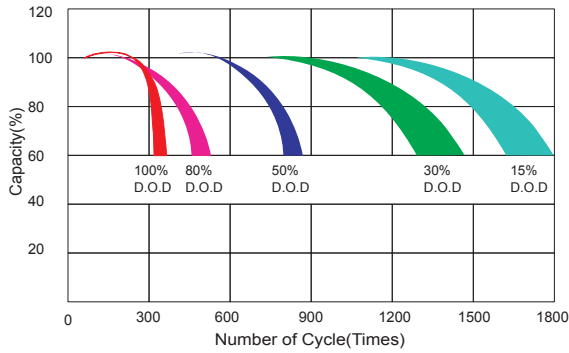
F.V/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
4.80V	1108.3	816.0	602.1	352.4	201.5	122.9	82.90	68.93	54.93	39.64	32.26	17.08
5.00V	1076.2	776.4	589.8	346.3	197.5	122.0	82.27	68.61	54.59	39.32	31.94	16.76
5.10V	1044.3	749.0	580.5	339.9	192.5	121.1	80.72	68.29	54.25	39.00	31.63	16.44
5.25V	937.8	691.2	552.7	337.3	188.5	120.1	78.84	67.65	53.57	38.67	31.31	16.12
5.40V	846.4	630.3	509.5	331.6	182.9	118.0	77.53	66.06	53.16	38.03	31.02	15.96
5.55V	722.7	563.3	457.0	310.4	176.4	112.7	76.20	62.87	51.83	36.42	30.67	15.31

Constant Power Discharge Characteristics: W(25°C)

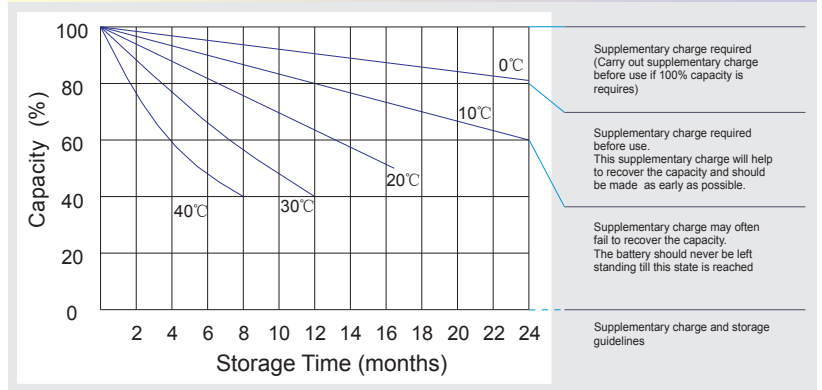
F.V/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
4.80V	5846	4389	3331	2017	1164	729.5	492.9	410.8	329.0	236.7	193.5	105.2
5.00V	5731	4254	3278	1992	1161	727.2	490.8	410.3	326.6	235.5	192.3	103.3
5.10V	5666	4142	3253	1975	1152	722.7	483.3	409.4	325.5	234.0	190.6	101.4
5.25V	5158	3857	3153	1984	1130	720.5	472.6	405.6	322.4	232.0	188.7	99.5
5.40V	4698	3555	2915	1952	1098	709.7	466.9	396.3	319.0	228.2	186.8	97.6
5.55V	4126	3245	2675	1839	1059	679.2	458.9	377.2	311.5	218.5	184.4	94.8

All mentioned values are average values.

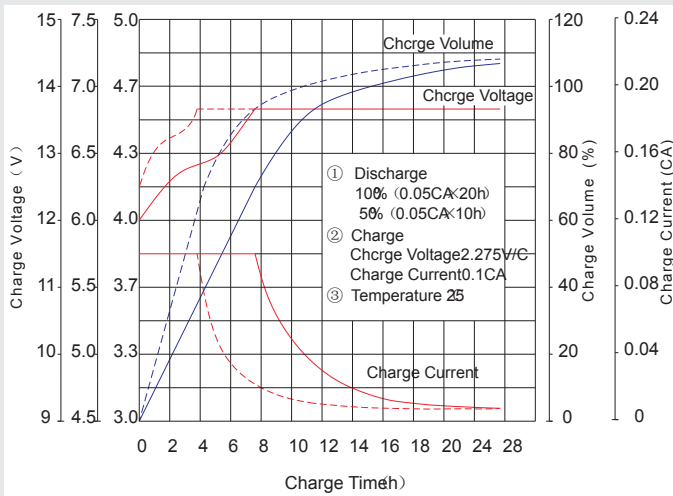
Life characteristics of cyclic use



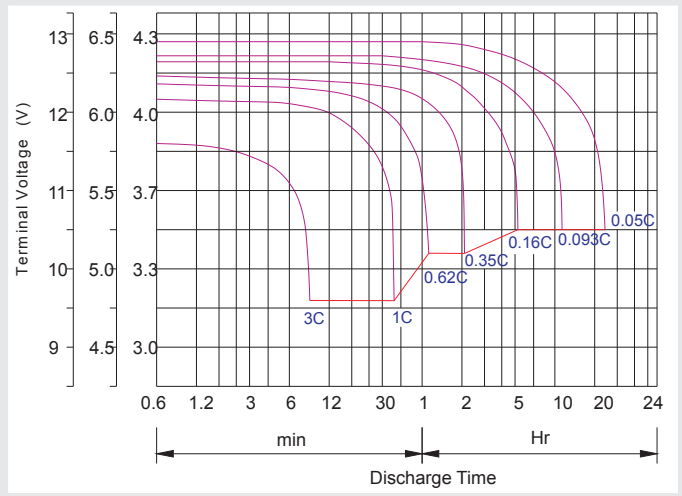
Storage characteristic



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	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 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