



EV6-225 (6V225Ah)

EV (Electric Vehicle) series is specially designed for frequent cyclic discharge. By using strong grids and specially designed active material, the EV series battery offers 30% more cyclic life than the standby series. It is suitable for solar energy systems, marine and RV etc.



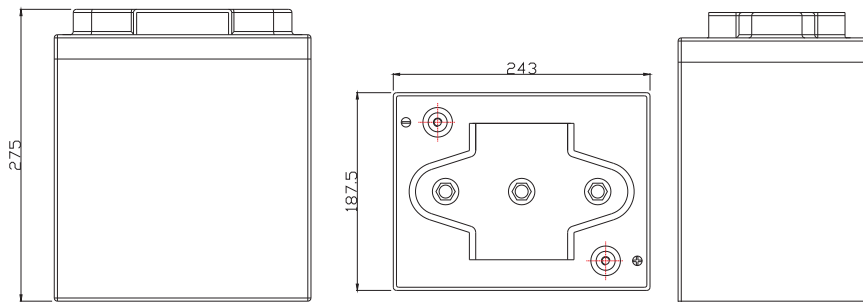
Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	225Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 32.0 Kg (Tolerance ±2%)
Max. Discharge Current	2250 A (5 sec)
Internal Resistance	Approx. 1.7 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	67.5A
Equalization and Cycle Service	7.3 to 7.4 VDC/unit Average at 25°C
Self Discharge	VMF Valve Regulated Lead Acid (VRLA) 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
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

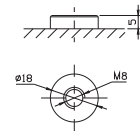


Dimensions

Unit: mm Dimension: 243 (L) × 187.5 (W) × 275 (H)



Terminal F14



Constant Current Discharge Characteristics: A (25°C)

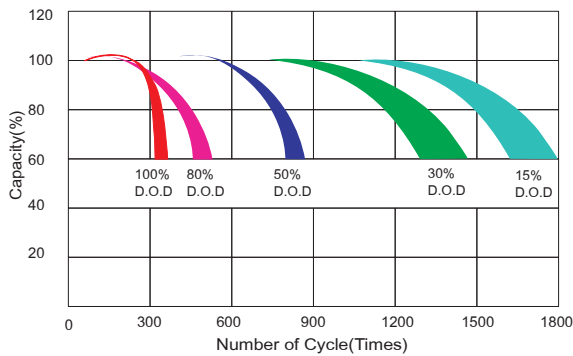
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	640.9	480.0	387.8	221.5	140.4	86.71	58.92	47.51	39.44	25.98	23.41	12.40
5.00V	622.3	456.8	379.8	218.7	138.6	84.96	57.83	46.84	39.09	25.88	23.18	12.16
5.10V	603.9	440.6	373.9	215.4	137.3	84.06	57.32	46.37	38.83	25.64	22.95	11.93
5.25V	542.3	406.6	356.0	209.4	135.6	82.96	56.81	45.68	38.51	25.41	22.73	11.70
5.40V	489.4	370.8	328.1	202.5	133.7	82.28	56.15	44.12	38.32	25.31	22.52	11.58
5.55V	417.9	331.4	294.3	194.8	130.5	78.97	55.05	43.49	38.04	25.11	22.26	11.11

Constant Power Discharge Characteristics: W (25°C)

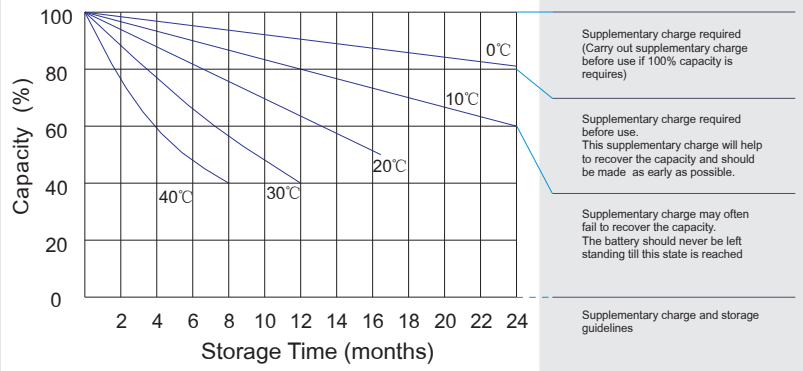
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	3314	2556	2133	1268	813.7	508.1	346.9	284.4	236.3	155.5	140.4	74.65
5.00V	3249	2478	2099	1255	806.3	501.8	341.7	280.3	234.1	154.9	139.3	73.36
5.10V	3212	2413	2075	1244	801.5	498.3	340.2	277.7	232.7	153.8	138.0	72.00
5.25V	2924	2246	1979	1219	796.4	492.0	337.4	274.0	230.8	152.5	136.7	70.64
5.40V	2663	2071	1829	1190	786.2	488.3	333.6	264.7	229.8	151.8	135.3	69.96
5.55V	2339	1872	1647	1157	774.4	470.0	328.1	260.9	229.0	150.7	133.9	67.46

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

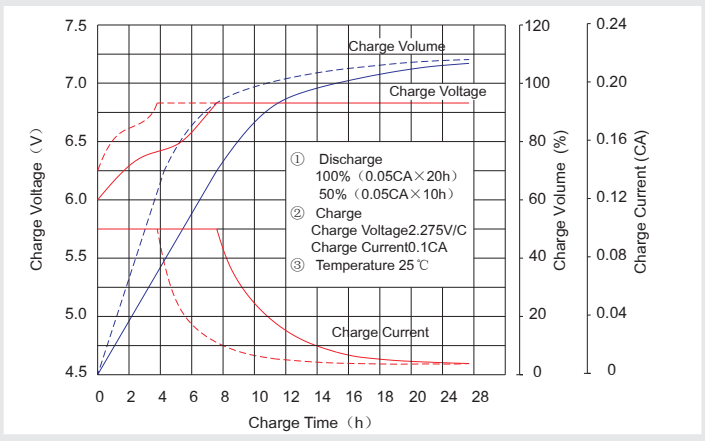
Life characteristics of cyclic use



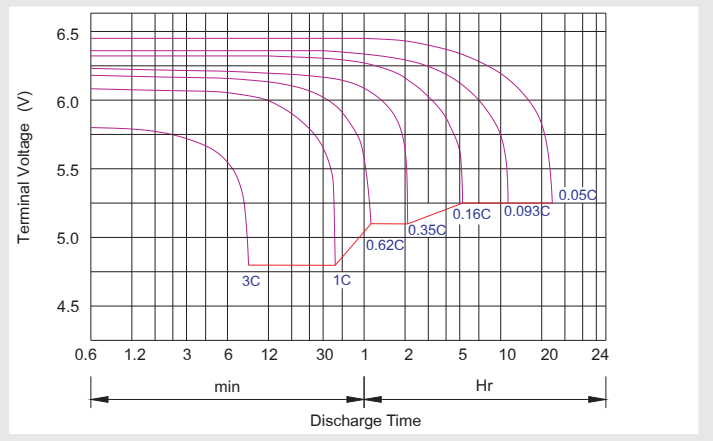
Storage characteristic



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

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

Charging Method:

Constant Voltage	-0.2Cx2h+7.2-7.35Vx24h, Max. Current 0.2C
Constant Current	-0.2Cx2h+0.1Cx7h+0.05Cx4h
Fast	-0.2Cx2h+0.3Cx3h

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 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.