

Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	400Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 25.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 0.7 mΩ
Terminal	F10(M8)
Max. Discharge Current	2000A (5 sec)
Design Life	20 years (floating charge)
Max. Charging Current	80.0 A
Reference Capacity	C1 244.4Ah C3 309.6Ah C5 349.0Ah C10 400.0Ah
Float Charging Voltage	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.43 V~2.47 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



MC (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The MC series batteries offer 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, V, telecom, broadband and cable TV, UPS systems etc.

ISO 9001	ISO 14001	
CE	RoHS	OHSAS 18001

Dimensions

Technical drawing of a battery showing front, side, and top views with dimensions.

Front View Dimensions:

- Height: 330
- Total Height: 342

Side View Dimensions:

- Width: 102
- Total Width: 171

Top View Dimensions:

- Length: 196
- Total Length: 342

Detail View (F10 TERMINAL) Dimensions:

- Terminal Diameter: 20
- Thread: M8
- Terminal Height: 5

Length	196±2mm (7.72 inches)
Width	171±2mm (6.73 inches)
Height	330±2mm (13.0 inches)
Total Height	342±2mm (13.5 inches)

Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F10 TERMINAL

Unit: mm

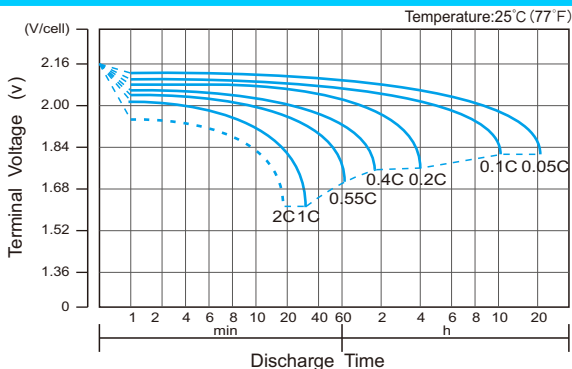
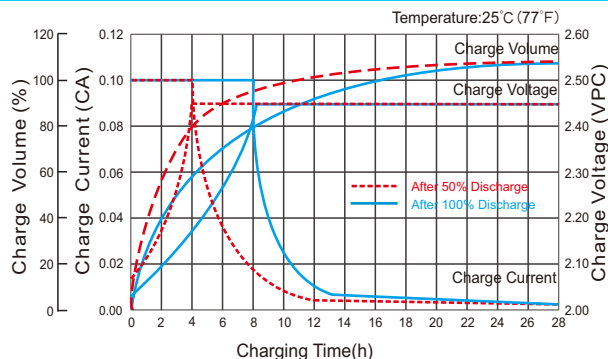
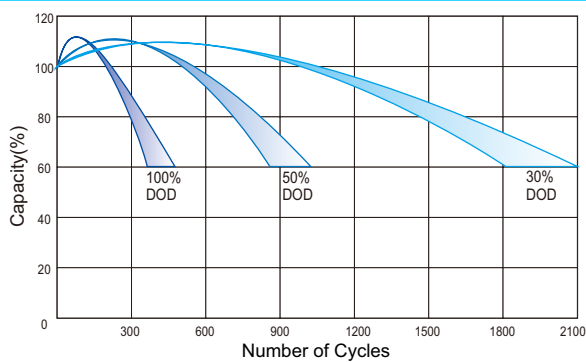
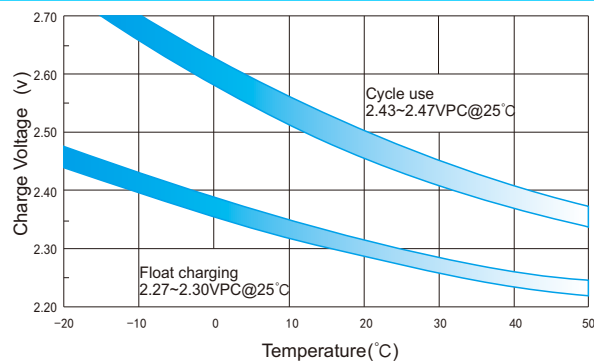
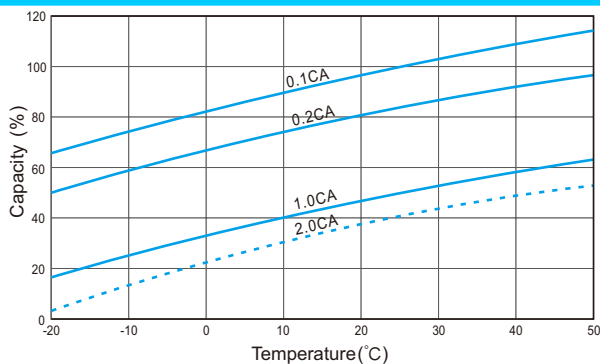
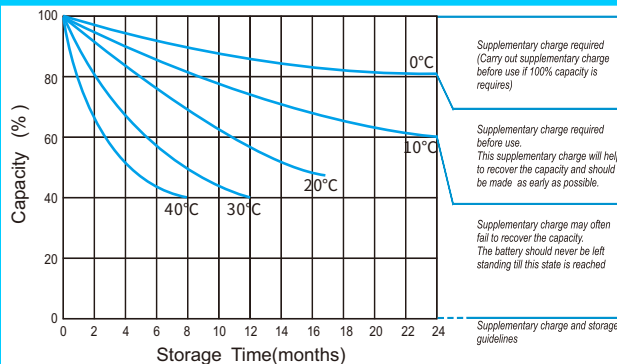
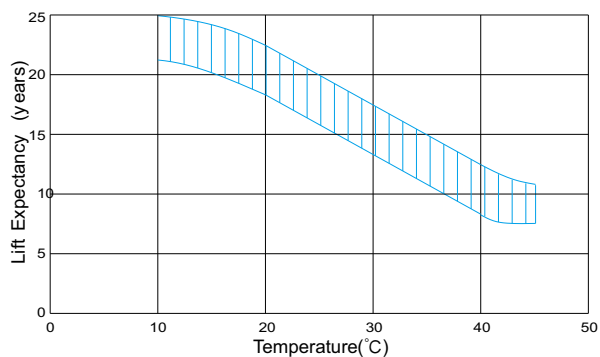
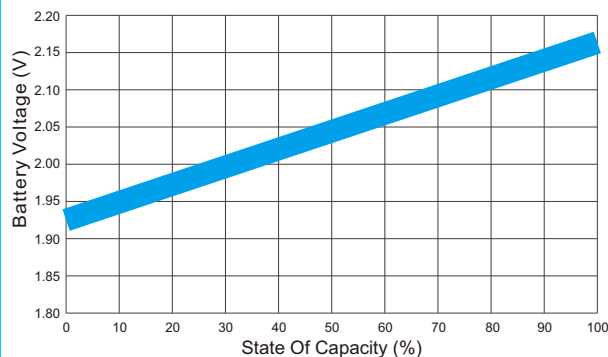
Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	615.3	390.8	244.4	150.5	112.8	90.82	75.46	50.72	42.20
1.65V	576.5	375.2	236.0	145.7	109.3	88.36	73.51	50.15	41.68
1.70V	539.9	358.6	228.3	140.9	106.4	85.95	71.59	49.37	41.06
1.75V	502.4	342.8	220.0	136.0	103.2	83.75	69.79	48.69	40.52
1.80V	463.9	327.6	211.6	131.1	100.0	81.35	67.99	47.86	40.00
1.85V	385.0	282.2	189.8	120.1	92.45	75.61	63.41	44.93	37.65

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	1075.6	709.8	459.3	285.3	215.5	174.4	145.5	99.05	82.95
1.65V	1022.7	688.6	446.1	277.5	209.7	170.3	142.2	98.14	82.06
1.70V	972.2	664.8	434.3	269.8	204.9	166.3	139.0	96.85	80.92
1.75V	917.9	642.0	420.9	261.6	199.6	162.6	136.0	95.69	79.96
1.80V	859.5	619.8	407.2	253.5	194.2	158.5	132.9	94.28	79.04
1.85V	723.4	539.1	367.4	233.5	180.4	147.9	124.4	88.71	74.51

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

Discharge Characteristics Curve

Charge Characteristic Curve for Cycle Use(IU)

Cycle Life in Relation to Depth of Discharge

Relationship Between Charging Voltage and Temperature

Temperature Effects on Capacity

Storage Characteristics

Effect of Temperature on Long Term Life

Relationship of OCV And State of Charge(20°C)


(Note) All above information shall be changed without prior notice, MAGNIZON reserves the right to explain and update the latest information

MAGNIZON MC BATTERIES

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specification are subject to modification without notice. Contact Magnizon for the latest information.