

Model # MC2-3000 (2V/3000AH)



Product Description

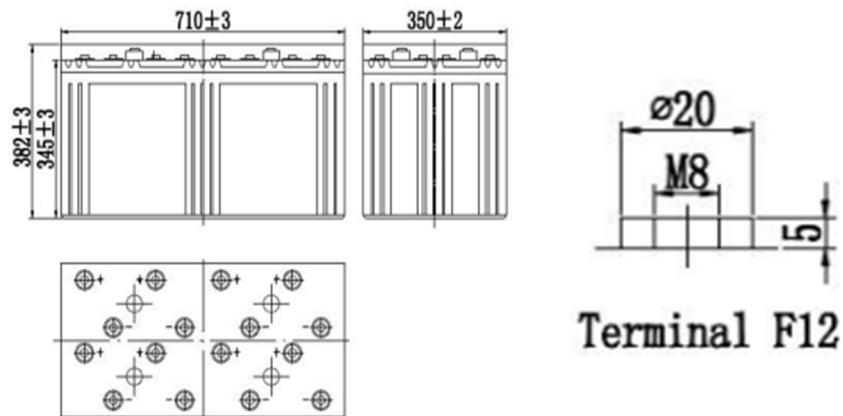
MC (AGM Deep Cycle)series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and special active material are designed for repeated deep-discharge applications. The MC series batteries offer 30%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

Technical Specifications

Nominal Voltage		2 V
Capacity (25°C)	10HR(1.80V)	3000 Ah
	3HR(1.75V)	2250Ah
	1HR(1.75V)	1650Ah
Dimension	Length	710±3mm (27.95inch)
	Width	350±2mm (13.78inch)
	Height	345±3mm (13.58inch)
	Total Height	382±3mm (15.04inch)
Approx. Weight		180.0kg (396.9lbs)±3%
Terminal type		F12
Internal resistance (Fully charged, 25°C)		Approx. 0.12mΩ
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C±3°C(77°F±5°F)
Operating temperature range	Discharge	- 15°C~50°C(5°F~122°F)
	Charge	- 10°C~50°C(14°F~122°F)
	Storage	-20°C~50°C(-4°F~122°F)
Float charging voltage(25°C)		2.25 to 2.30V Temperature compensation: -3mV/°C
Cyclic charging voltage(25°C)		2.43 to 2.47V Temperature compensation: -5mV/°C
Maximum charging current		600A
Maximum discharge current		15000A(5 sec.)
Designed floating life(20°C)		15~ 18 years

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Dimensional details



Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h
1.60V	2610	1770	1082	765	618	515	453	362	306	161	138
1.65V	2558	1743	1074	761	615	512	450	359	305	161	137
1.70V	2480	1700	1065	756	611	507	447	357	305	159	137
1.75V	2420	1665	1049	750	606	504	444	354	302	159	136
1.80V	2331	1614	1023	728	588	489	431	344	300	158	135

Constant Power Discharge Characteristics (Watt, 25°C)

F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h
1.60V	4881	3363	2087	1500	1212	1013	893	719	608	321	278
1.65V	4784	3312	2075	1491	1205	1007	887	714	606	320	276
1.70V	4637	3228	2055	1481	1196	1001	881	710	605	320	276
1.75V	4524	3165	2025	1470	1188	993	875	705	602	317	275
1.80V	4359	3068	1973	1427	1152	963	849	684	597	315	272

Note: The above characteristics data can be obtained within three charge/discharge cycles.

Capacity Factors With Different Temperature

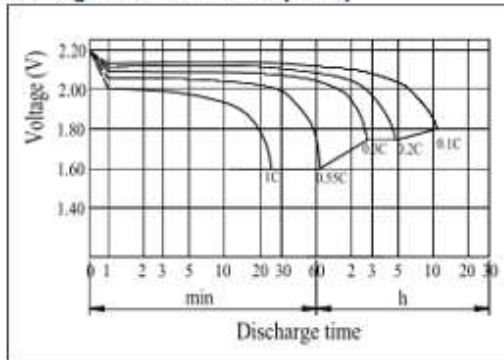
Temperature	-30°C	-20°C	-10°C	0°C	10°C	20°C	25°C	30°C	40°C	50°C
Capacity	60%	75%	83%	89%	92%	99%	100%	103%	105%	109%

Construction

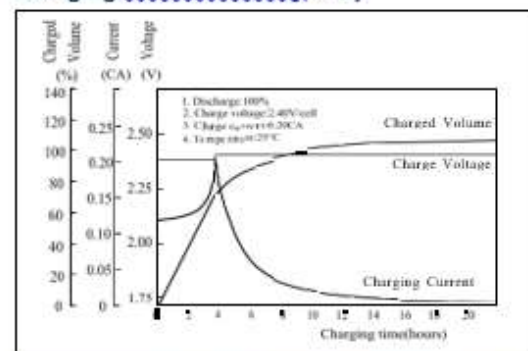
Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

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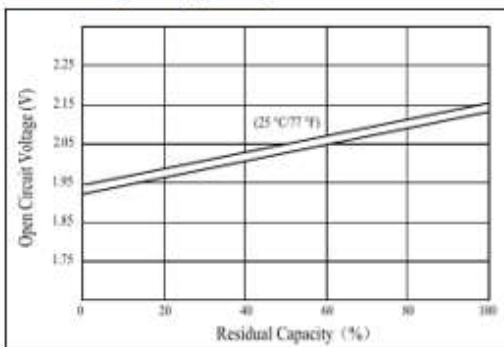
Discharge Characteristics (25°C)



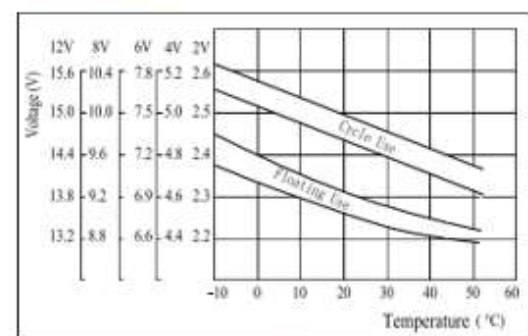
Charging Characteristics (25°C)



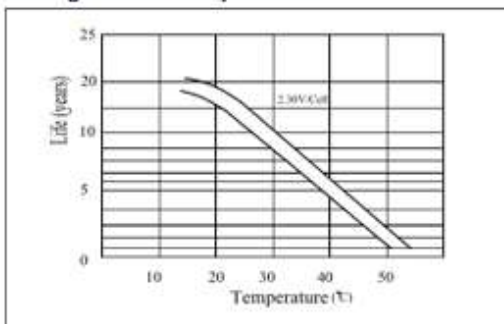
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



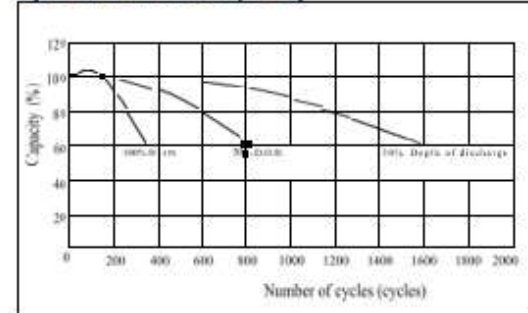
The Relationship for Charging Voltage and Temperature



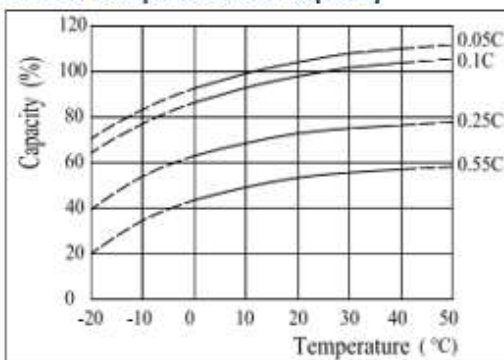
Floating Life on Temperature



Cycle Life on D.O.D (25°C)



Effect of Temperature on Capacity



Self-discharge Characteristics

