

General features for MPE Series (AGM) battery

- * Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- * Computer designed lead, calcium tin alloy grid for high power density.
- * Long service life, float or cyclic applications.
- * UL-recognized component.
- * No need of balanced charge or boost.
- * Valve Regulated & High Discharge Rate Capability.
- * Maintenance-free operation. Low self discharge.
- * Case and cover are available in both standard and flame retardant ABS.
- * Battery comply to the most popular international standards, like IEC60896-21/22, etc.



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MPE2-800 (2V800Ah)

Specifications

Nominal Voltage	2 V	
Rated capacity (10 hour rate)	800 Ah	
Dimensions (±2mm)	Total Height (Include top cover)	367 mm (14.4 inches)
	Height	330 mm (13.0 inches)
	Length	410 mm (16.1 inches)
	Width	175 mm (6.89 inches)
Weight Approx (±3%)	50.50 Kg (111.20lbs)	

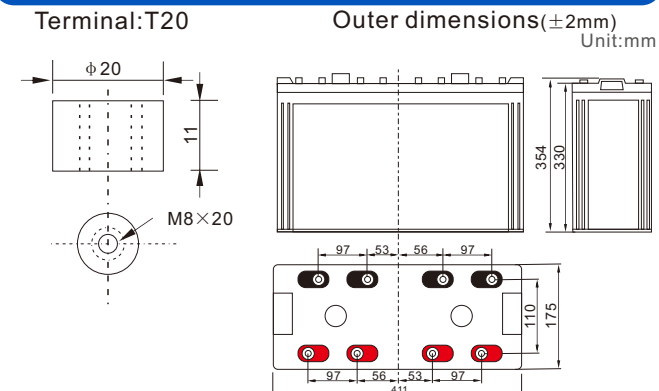
Battery picture and construction



Battery Construction

Component	Positive plate	Negative plate	Container	Cover
Raw material	Lead dioxide	Lead	ABS	ABS
Component	Electrolyte	Separator	Safety valve	Terminal
Raw material	Dilute sulfuric acid	Fibreglass	Rubber	Copper

Outer dimension and terminal



(Total height 367mm includes the top cover)

Characteristics

Capacity 25°C(77°F)	10 hour rate(80A, 1.8V) 5 hour rate(128A, 1.75V) 1 hour rate(480A, 1.6V)	800Ah 640Ah 480Ah
Internal Resistance	Full charged battery at 25°C(77°F)	Approx 0.35 mΩ
Capacity affected by Temperature (10hour rate)	40°C (104°F)	102%
	25°C (77°F)	100%
	0°C (32°F)	85%
	-15°C (5°F)	65%
Remaining capacity Self-Discharge At 25°C(77°F)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	82%
	Capacity after 12 month storage	64%
Terminal type	T20	
Max. Discharge current 25°C/(77°F)	5500A (5Seconds)	
Nominal operating temperature	25°C ±5°C(77°F ±9°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)
Charge methods (constant Voltage) At 25°C(77°F)	Cycle use	Initial Charging Current less than 200 A Voltage 2.42-2.50V Temperature compensation:-5mV/°C
	Standby use	Voltage 2.25-2.30V Temperature compensation:-3mV/°C

Constant current discharge (25°C , 77 °F)

Unit:A

Constant power discharge (25°C , 77 °F)

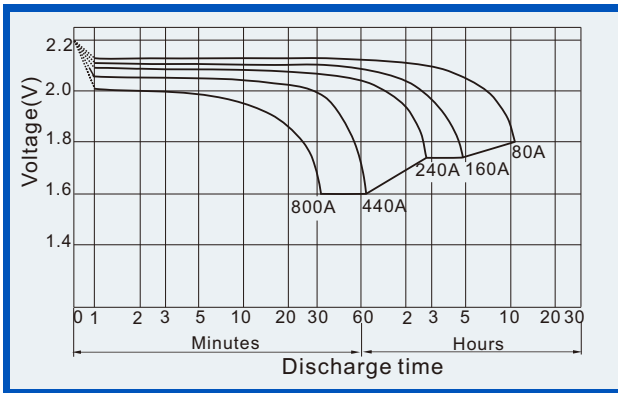
Unit:watts

Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	A	2562	1688	1361	912	480	280.0	205.6	160.0	132.0	93.6	45
	W	4407	3005	2432	1634	864	512	381.4	300.0	250.1	178.8	88
1.70V	A	2482	1523	1282	872	451	267.2	200.0	156.0	129.6	91.2	44.0
	W	4417	2835	2390	1632	851	513	386.0	302.3	251.8	177.8	86.0
1.75V	A	2401	1362	1121	816	437	260.8	195.2	153.6	128.0	90.4	44.0
	W	4369	2583	2132	1565	843	504	379.1	299.5	250.1	177.2	86.7
1.80V	A	2314	1284	1042	752	422	254.4	190.4	151.2	124.8	88.0	43.2
	W	4326	2468	2000	1452	819	497	374.1	297.6	245.9	173.8	85.8
1.85V	A	2236	1203	962	672	408	248.0	184.0	147.2	121.6	85.6	40.8
	W	4226	2322	1866	1310	800	489	364.3	292.2	241.9	170.9	82.4

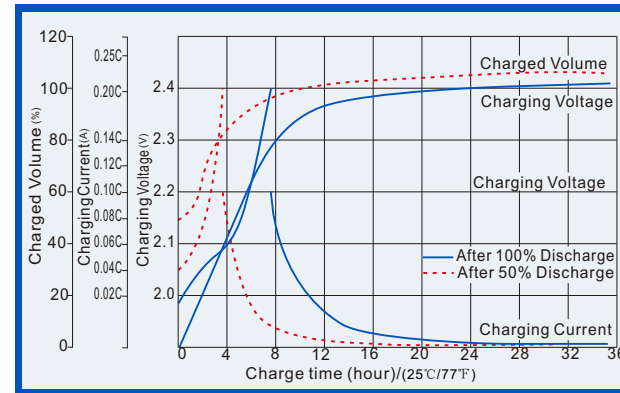
(Above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.)

**Deep cycle battery (VRLA Battery, AGM technology)
Maintenance-free Sealed Lead Acid Rechargeable Battery**

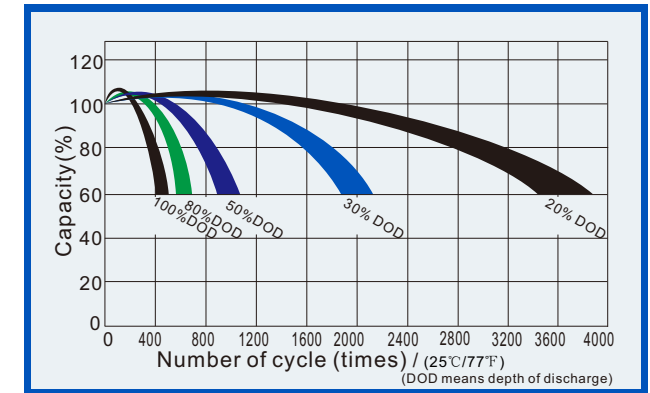
Discharge characteristics (25°C, 77°F)



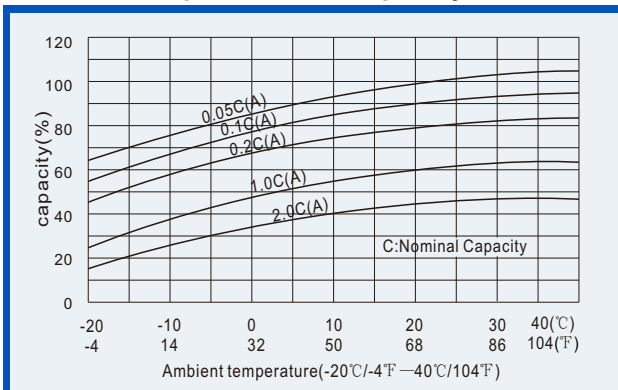
Charge characteristics (25°C, 77°F)



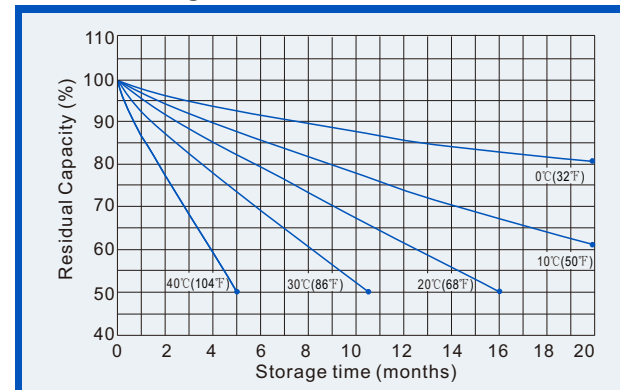
Life characteristics of Cyclic Use (25°C, 77°F)



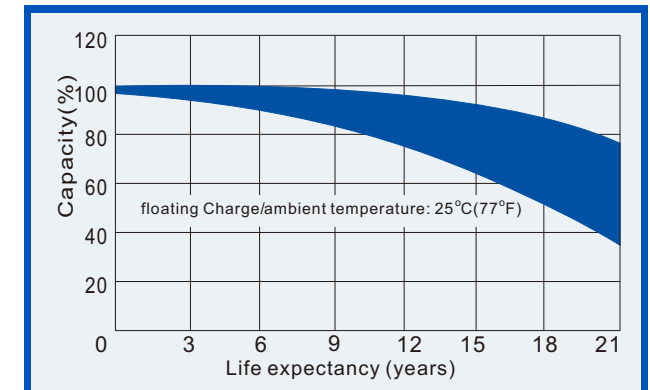
Effect of Temperature on capacity



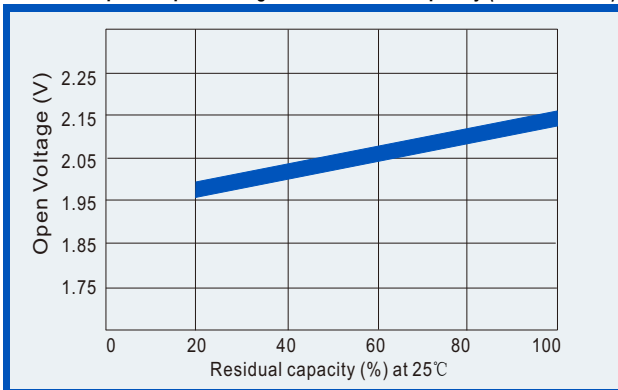
Self-discharge characteristics



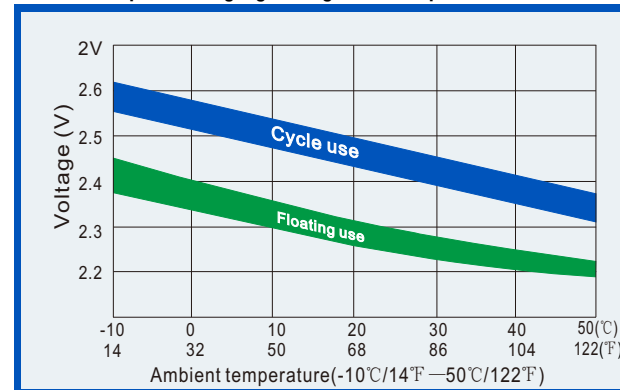
Life Characteristics of float service (25°C, 77°F)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life

