

## General features for MPt 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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**MP2-1500 (2V1500Ah)**

## Specifications

Nominal Voltage		2 V
Rated capacity (10 hour rate)		1500 Ah
Dimensions (±2mm)	Total Height (Include top cover)	382 mm (15.0 inches)
	Height	344 mm (13.5 inches)
	Length	401 mm (15.8 inches)
	Width	351 mm (13.8 inches)
Weight Approx (±3%)		90.0 Kg (198.4lbs)

## Battery picture and construction

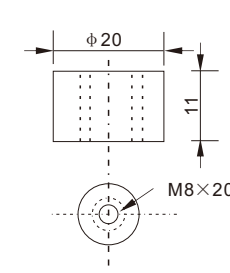


### Battery Construction

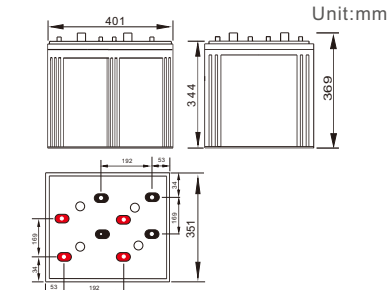
Component	Positive plate	Negative plate	Container	Cover
Raw material	Lead dioxide	Lead	ABS	ABS
Component	Electrolyte	Separator	Safety valve	Terminal
Raw material	Dilute sulfuric acid	Fibreglass	Rubber	Copper

## Outer dimension and terminal

Terminal:T20



Outer dimensions(±2mm)



(Total height 382mm includes the top cover)

## Characteristics

Capacity 25°C(77°F)	10 hour rate(150A,1.8V) 5 hour rate(240A,1.75V) 1 hour rate(900 A,1.6V)	1500Ah 1200Ah 900Ah
Internal Resistance	Full charged battery at 25°C(77°F)	Approx 0.3 mΩ
Capacity affected by Temperature (10hour rate)	40°C (104°F) 25°C (77°F) 0°C (32°F) -15°C (5°F)	102% 100% 85% 65%
Remaining capacity Self-Discharge At 25°C(77°F)	Capacity after 3 month storage Capacity after 6 month storage Capacity after 12 month storage	91% 82% 64%
Terminal type	T20	
Max. Discharge current 25°C/(77°F)	9000A (5Seconds)	
Nominal operating temperature	25°C ±5°C(77°F ±9°F)	
Operating Temperature Range	Discharge Charge Storage	-15°C~50°C (5°F~122°F) -10°C~50°C (14°F~122°F) -20°C~50°C (-4°F~122°F)
Charge methods (constant Voltage) At 25°C(77°F)	Cycle use Standby use	Initial Charging Current less than 375A Voltage 2.42-2.48V Temperature compensation:-5mV/°C 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)

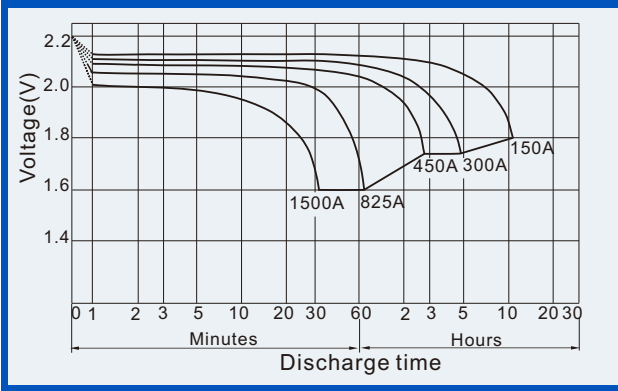
Unit:watts

Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	A	4805	3165	2552	1710	900	525.0	385.5	300.0	247.5	175.5	85
	W	8264	5634	4560	3064	1620	961	715.1	562.5	469.0	335.2	165
1.70V	A	4653	2856	2403	1635	846	501.0	375.0	292.5	243.0	171.0	82.5
	W	8282	5315	4482	3059	1595	962	723.8	566.9	472.1	333.5	161.3
1.75V	A	4502	2555	2102	1530	819	489.0	366.0	288.0	240.0	169.5	82.5
	W	8193	4843	3997	2935	1581	945	710.8	561.6	469.0	332.2	162.5
1.80V	A	4338	2408	1953	1410	792	477.0	357.0	283.5	234.0	165.0	81.0
	W	8112	4627	3750	2723	1536	931	701.5	557.9	461.0	325.9	160.8
1.85V	A	4193	2256	1803	1260	765	465.0	345.0	276.0	228.0	160.5	76.5
	W	7924	4354	3498	2457	1499	916	683.1	547.9	453.5	320.4	154.5

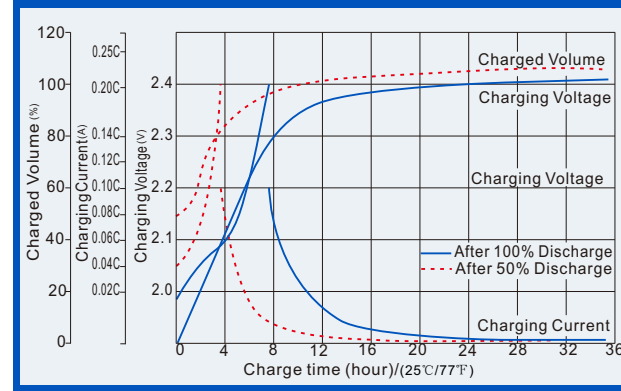
(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

# VRLA Battery (AGM technology) Maintenance-free Sealed Lead Acid Rechargeable Battery

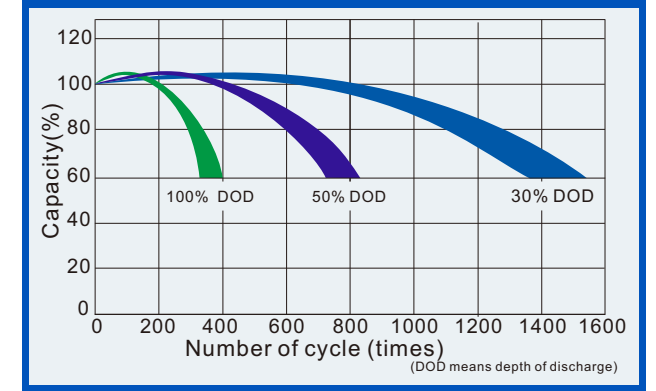
**Discharge characteristics (25°C, 77°F)**



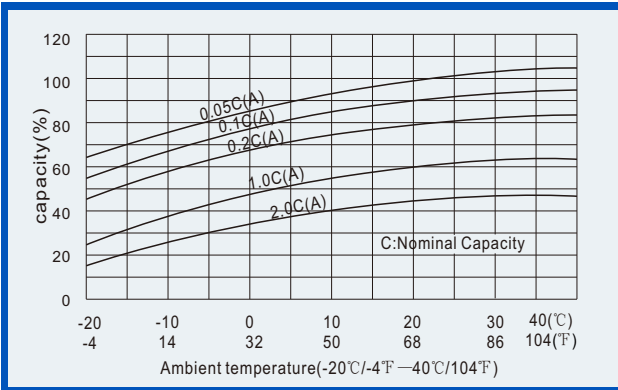
**Charge characteristics (25°C, 77°F)**



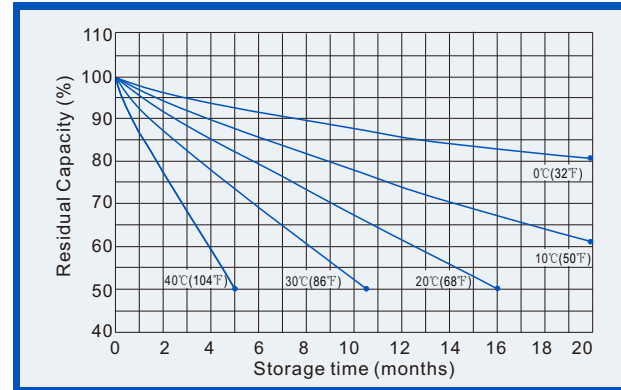
**Life characteristics of Cyclic Use (25°C, 77°F)**



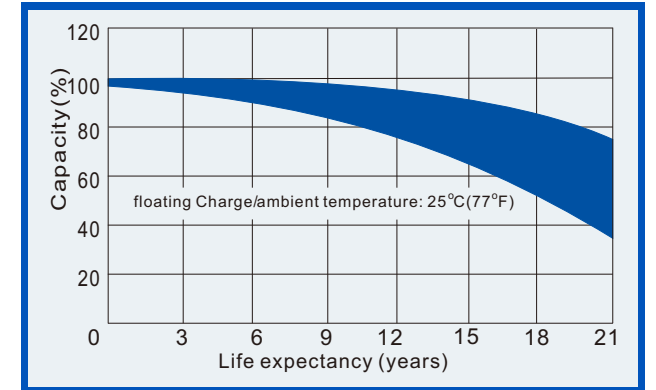
**Effect of Temperature on capacity**



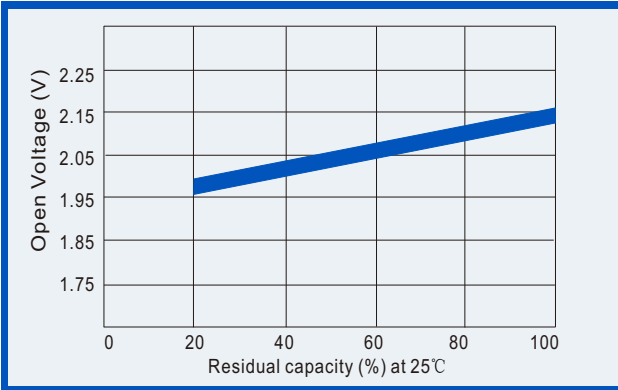
**Self-discharge characteristics**



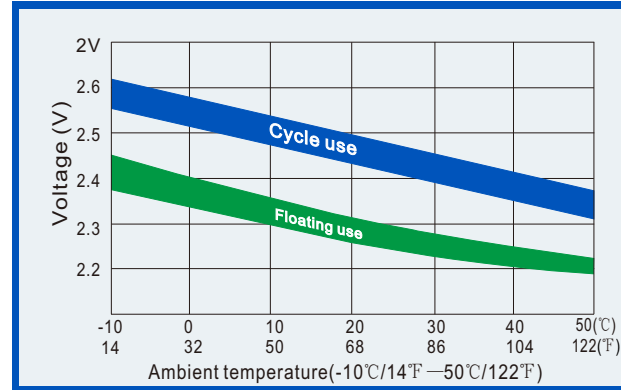
**Life Characteristics of float service (25°C, 77°F)**



**Relationships for open voltage and remained capacity (for reference)**



**Relationship for charging voltage and temperature**



**Temperature effects on floating life**

