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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MP2-600 (2V600Ah)

Specifications

Nominal Voltage		2 V
Rated capacity (10 hour rate)		600 Ah
Dimensions (±2mm)	Total Height (Include top cover)	367 mm (14.5 inches)
	Height	331 mm (13.0 inches)
	Length	301 mm (11.9 inches)
	Width	175 mm (6.89inches)
Weight Approx (±3%)		35.0Kg (77.2 lbs)

Battery picture and construction

Terminal position:

Battery Construction

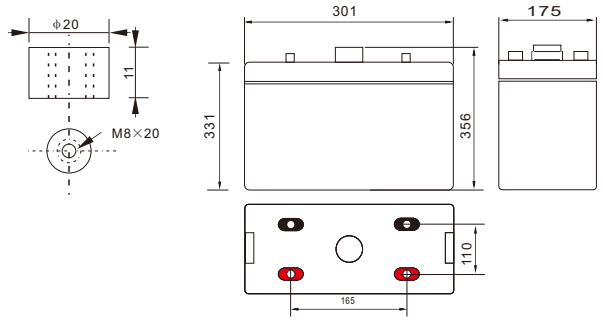
Component	Positive plate	Negative plate	Container	Cover
Raw material	Lead dioxide	Lead	ABS	ABS
Component	Electrolyte	Separator	Safety valve	Terminal
Raw material	Dilute sulfuric acid	Fibreglass	Rubber	Copper

Outer dimension and terminal

Terminal:T20

Outer dimensions(±2mm)

Unit:mm



(Total height 367mm includes the top cover)

Characteristics

Capacity 25℃(77℉)	10 hour rate(60A,1.8V)	600Ah
	5 hour rate(96A,1.75V)	480Ah
	1 hour rate(360 A,1.6V)	360Ah
Internal Resistance	Full charged battery at 25℃(77℉)	Approx 0.50 mΩ
Capacity affected by Temperature (10hour rate)	40℃ (104℉)	102%
	25℃ (77℉)	100%
	0℃ (32℉)	85%
	-15℃ (5℉)	65%
Remaining capaicty Self-Discharge At 25℃(77℉)	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℃/(77℉)	4000A (5Seconds)	
Nominal operating temperature	25℃ ±5℃(77℉ ±9℉)	
Operating Temperature Range	Discharge	-15℃～50℃ (5℉～122℉)
	Charge	-10℃～50℃ (14℉～122℉)
	Storage	-20℃～50℃ (-4℉～122℉)
Charge methods (constant Voltage) At 25℃(77℉)	Cycle use	Initial Charging Current less than 150 A Voltage 2.42-2.48V Temperature compensation:-5mV/℃
	Standby use	Voltage 2.25-2.30V Temperature compensation:-3mV/℃

Constant current discharge (25℃ , 77 ℉)

Unit:A

Constant power discharge (25℃ , 77 ℉)

Unit:watts

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

Time		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	A	1922	1266	1021	684	360	210.0	154.2	120.0	99.0	70.2	63.0	34
	W	3305	2253	1824	1226	648	384	286.0	225.0	187.6	134.1	121.3	66
1.70V	A	1861	1142	961	654	338	200.4	150.0	117.0	97.2	68.4	61.8	33.0
	W	3313	2126	1793	1224	638	385	289.5	226.7	188.9	133.4	121.0	64.5
1.75V	A	1801	1022	841	612	328	195.6	146.4	115.2	96.0	67.8	60.6	33.0
	W	3277	1937	1599	1174	632	378	284.3	224.6	187.6	132.9	119.5	65.0
1.80V	A	1735	963	781	564	317	190.8	142.8	113.4	93.6	66.0	60.0	32.4
	W	3245	1851	1500	1089	615	372	280.6	223.2	184.4	130.4	118.9	64.3
1.85V	A	1677	902	721	504	306	186.0	138.0	110.4	91.2	64.2	57.0	30.6
	W	3170	1742	1399	983	600	366	273.2	219.1	181.4	128.1	114.7	61.8

(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 Rechageable Battery

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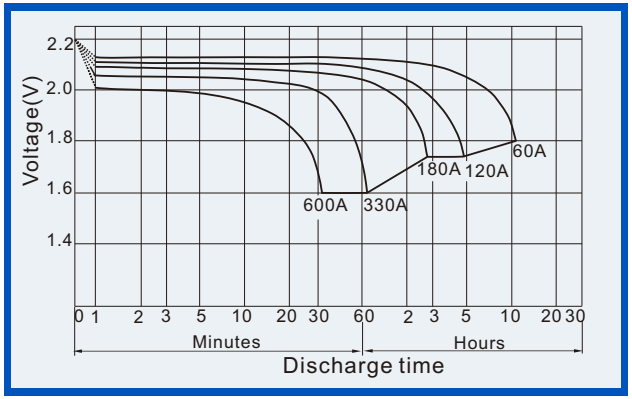
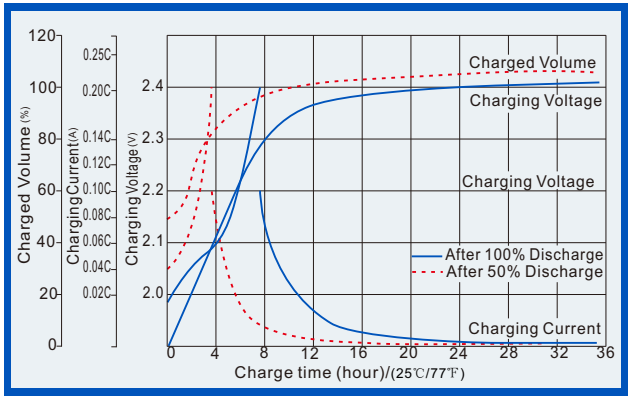
MP2-600 (2V600Ah)

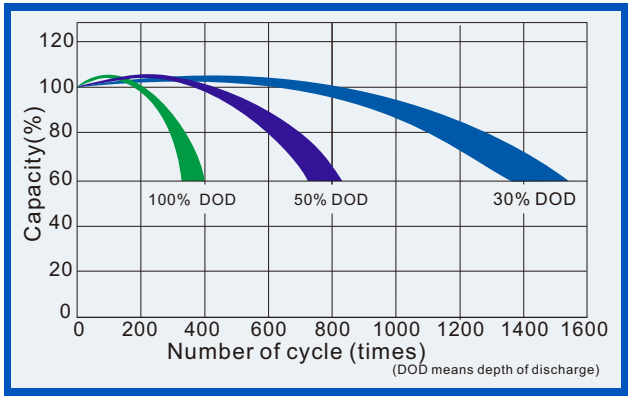
Discharge characteristics (25℃,77°F)



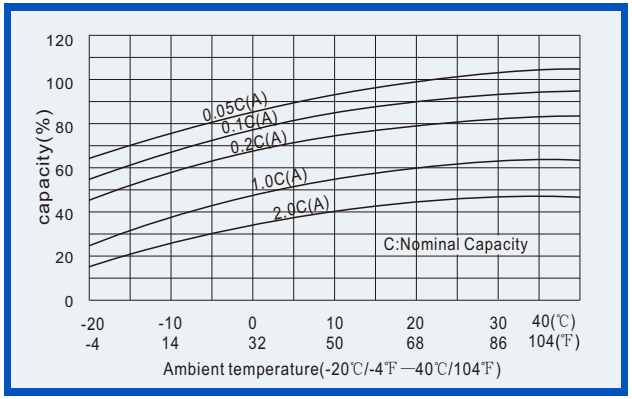
Charge characteristics (25℃,77°F)



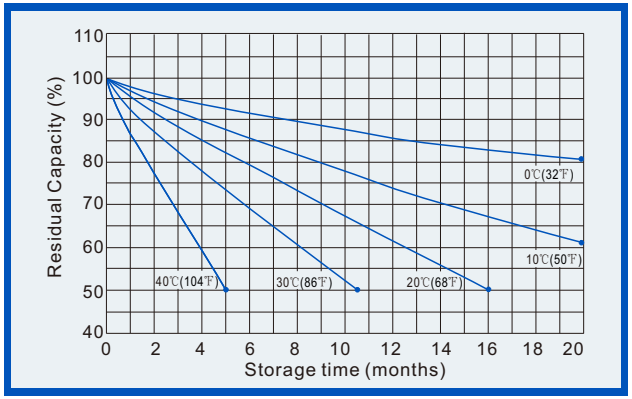
Life characteristics of Cyclic Use (25℃,77°F)



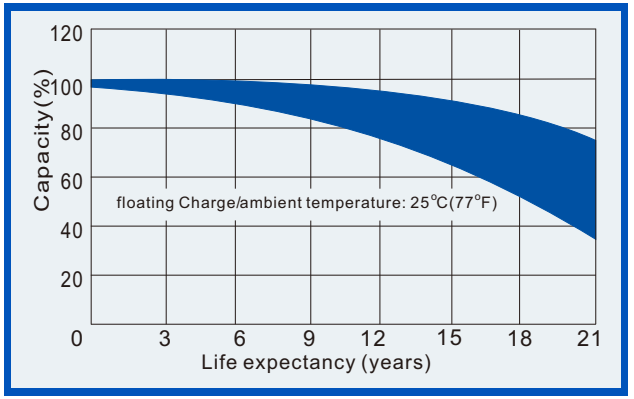
Effect of Temperature on capacity



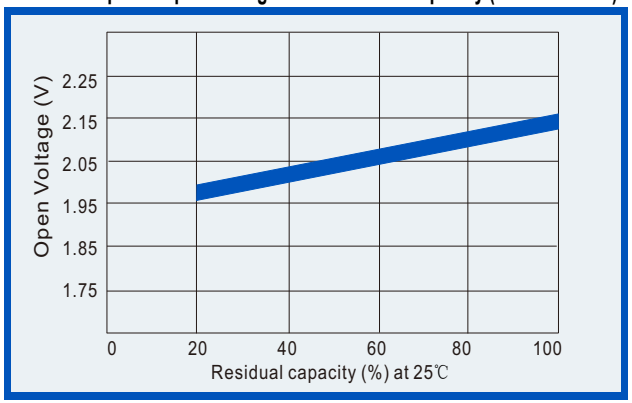
Self-discharge characteristics



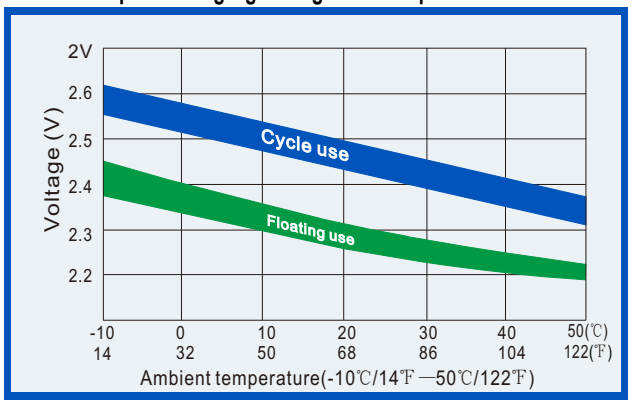
Life Characteristics of float service (25℃,77°F)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life