

General features for MPb Series (AGM) battery

- * Stable quality & high reliability.
- * Unique construction and sealing technique guarantees.
- * Design life 10years in float service;the battery comply to the most popular international standards,like IEC60896-21/22,etc
- * Maintenance-free operation.
- * UL-recognized component.
- * Heavy duty grids:
The heavy-duty lead calcium-alloy grids ,provide an extra margin of performance and service life in float & cyclic.
- * Case and cover are available in both standard and flame retardant ABS.
- * Low self discharge;low pressure venting system.



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MP8-180 (8V180Ah)

Specifications

Nominal Voltage		8V
Rated capacity (10 hour rate)		180 Ah
Dimensions (±2mm)	Total Height	298mm (11.73inches)
	Height	295 mm (11.61 inches)
	Length	260 mm (10.2 inches)
	Width	180 mm (7.09 inches)
Weight Approx (±3%)		35.0 Kg (77.1lbs)

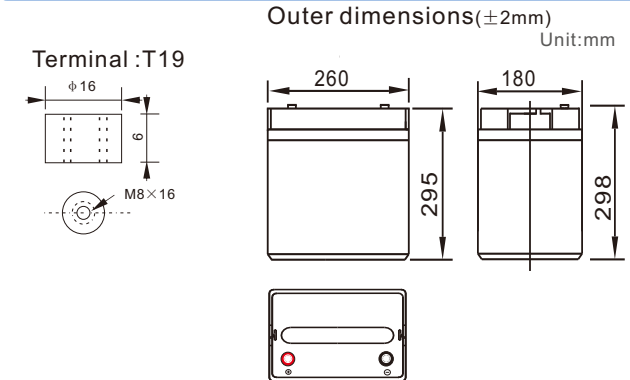
Battery picture and construction



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	Fiberglass	Rubber	Copper

Outer dimension and terminal



Characteristics

Capacity 25°C(77°F)	10 hour rate (18.0 A,7.2V) 5 hour rate (29A,7.0V) 1 hour rate (108 A,6.4V)	180Ah 145Ah 108 Ah
Internal Resistance	Full charged battery at 25°C(77°F)	Approx.2.0mΩ
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	T19	
Max. Discharge current 25°C/(77°F)	1400A (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 45 A Voltage 9.67-9.93V Temperature compensation:-20mV/°C Voltage 9.00-9.20V Temperature compensation:-12mV/°C

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

Unit:A

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

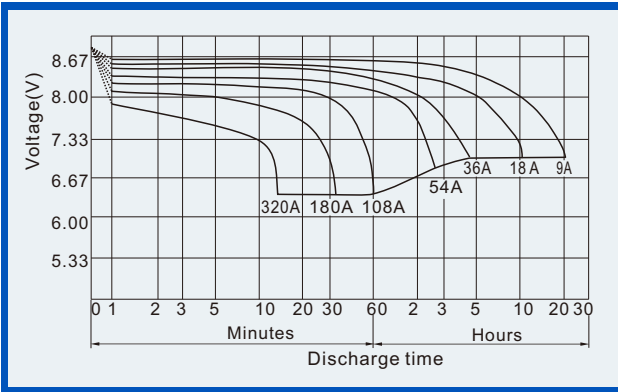
Unit:watts

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)													
Time		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
6.40V	A	577	380	306	205	108	63	46	36	30	21	18.9	10.2
	W	3958	2705	2190	1473	776	461	340	270	225	161	146	79
6.80V	A	558	343	288	196	102	60	45	35	29	20.5	18.5	9.9
	W	3978	2558	2153	1463	763	462	345	272	226	160	145	77
7.00V	A	540	307	252	184	98	59	44	35	29	20.3	18.2	9.9
	W	3928	2320	1918	1410	755	454	341	270	225	159	143	77
7.20V	A	521	289	234	169	95	57	43	34	28	19.8	18.0	9.7
	W	3898	2220	1800	1310	730	445	335	268	221	156	143	77
7.40V	A	503	271	216	151	92	56	41	33	27	19.3	17.1	9.2
	W	3800	2093	1680	1176	718	438	326	262	218	154	138	74

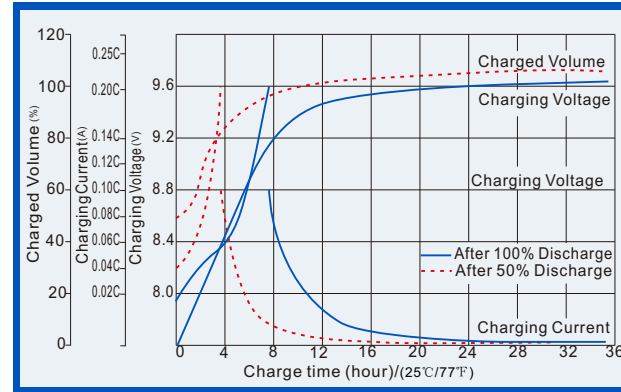
(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

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

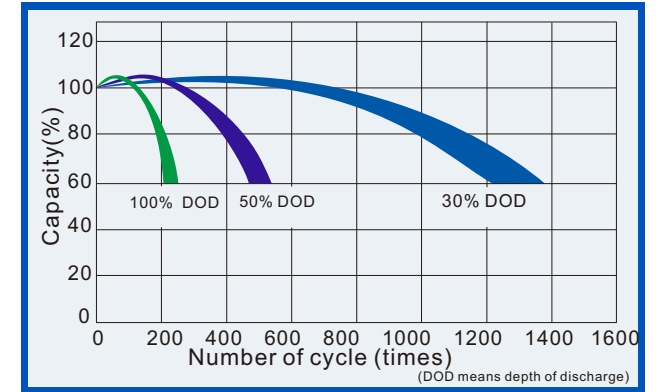
Discharge characteristics (25°C, 77°F)



Charge characteristics (25°C, 77°F)



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



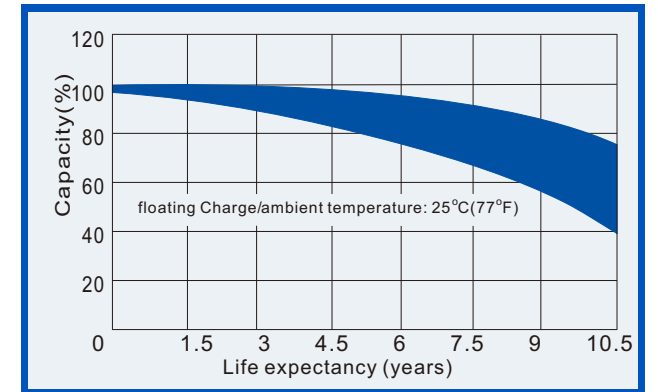
Effect of Temperature on capacity



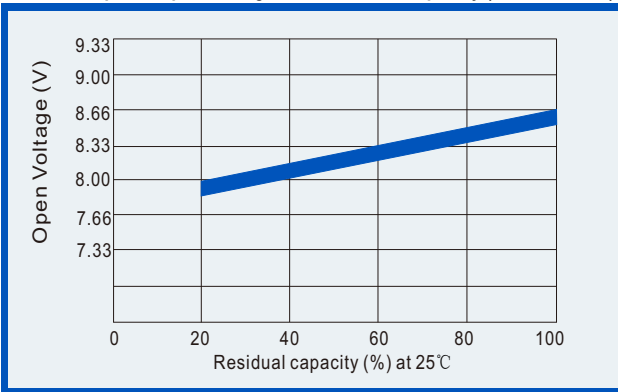
Self-discharge characteristics



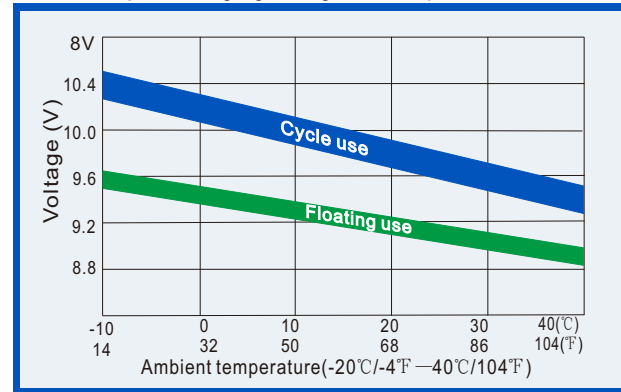
Life Characteristics of float service (25°C, 77°F)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life

