

General features for MPG (GEL) battery

- * Nanometer SiO₂ and H₂SO₄ gelled electrolyte technology for 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.
- * Not restricted for air transport-complies with IATA/ICAO Special Provision A67.UL-recognized component.
- * Long service life, float or cyclic applications, specially suitable for motive power applications, such as golf trailer, srubber, folklift, etc.
- * Maintenance-free operation. Lower self discharge.
- * Case and cover available in both standard and flame retardant ABS.
- * The design life to 6V GEL battery is 15years, the deep discharge cycles increased over 50% as compared with the AGM battery.



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MPG6-200 (6V200Ah)

Specifications

Nominal Voltage		6V
Rated capacity (20 hour rate)		200 Ah
Dimensions (±2mm)	Total Height	230 mm (9.05 inches)
	Height	224 mm (8.80 inches)
	Length	323 mm (12.7 inches)
	Width	178 mm (7.00 inches)
Weight Approx (±3%)		31.0 Kg (68.26lbs)

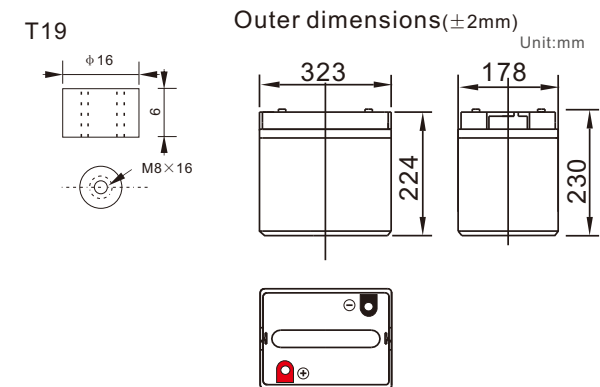
Battery picture and construction



Battery Construction

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

Outer dimension and terminal



Characteristics

Capacity 25°C(77°F)	20 hour rate(10 A, 5.4V) 10 hour rate(18.4A, 5.4V) 5 hour rate(29.4A, 5.25V) 1 hour rate(110A, 4.8V)	200Ah 184Ah 147Ah 110Ah
Internal Resistance	Full charged battery at 25°C(77°F)	Approx 2.3mΩ
Capacity affected by Temperature (20hour 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)	1500A (5Seconds)	
Nominal operating temperature	25°C ±5°C(77°F ±9°F)	
Operating Temperature Range	Discharge Charge Storage	-20°C ~55°C (-4°F ~131°F) -10°C ~55°C (14°F ~131°F) -20°C ~55°C (-4°F ~131°F)
Charge methods (constant Voltage) At 25°C(77°F)	Cycle use	Initial Charging Current less than 50 A Voltage 7.25-7.50V Temperature compensation:-20mV/°C
	Standby use	Voltage 6.75-6.9V Temperature compensation:-30mV/°C

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

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

Unit:A

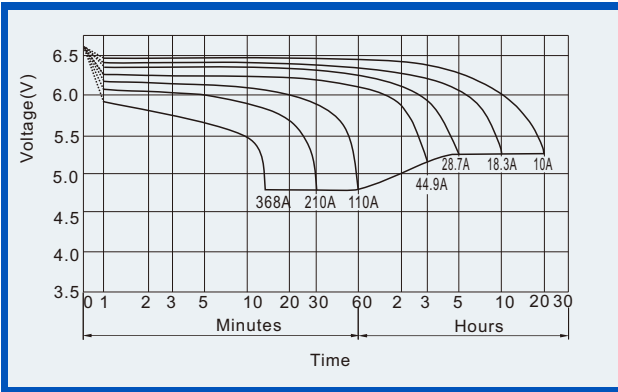
Unit:watts

Time	10min	30min	1h	2h	3h	4h	5h	8h	10h	20h
4.80V	A	388	210	110	64.4	47.3	36.8	30.4	21.5	10.4
	W	2073	1128	596	354	263	207	173	123	60.7
5.10V	A	350	201	104	61.5	46.0	35.9	29.8	21.0	10.12
	W	1956	1126	587	354	266	209	174	123	59.4
5.25V	A	313	188	100	60.0	44.9	35.3	29.4	20.8	10.1
	W	1782	1080	582	348	262	207	173	122	59.7
5.40V	A	295	173	97	58.5	43.8	34.8	28.7	20.2	10.00
	W	1703	1002	565	343	258	205	170	120	59.6
5.55V	A	277	155	94	57.0	42.3	33.9	28.0	19.7	9.38
	W	1602	904	552	337	251	202	167	118	56.9

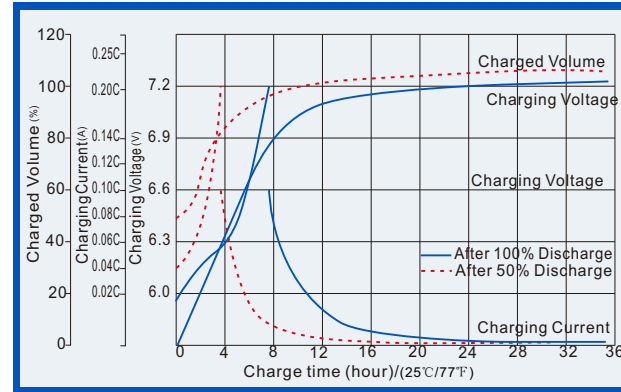
(Above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.)

GEL Battery (GEL technology) Maintenance-free Sealed Lead Gel Rechargeable Battery

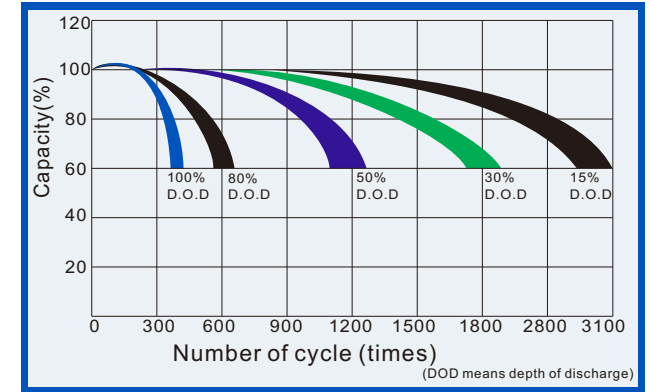
Discharge characteristics (25°C, 77°F)



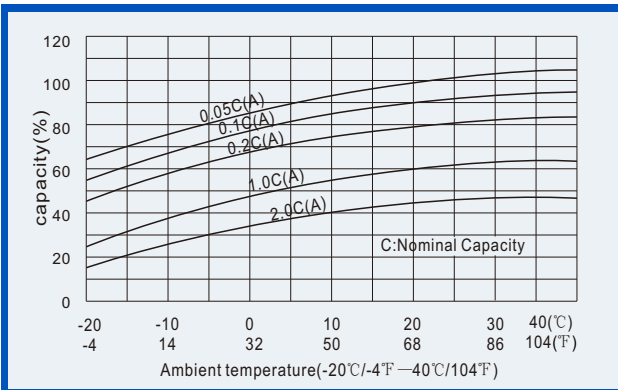
Charge characteristics (25°C, 77°F)



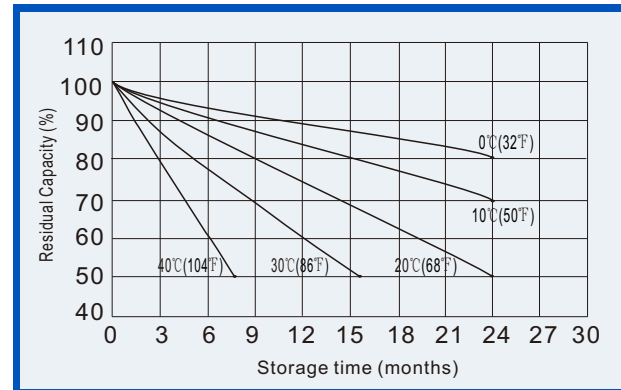
Life characteristics of Cyclic Use (25°C, 77°F)



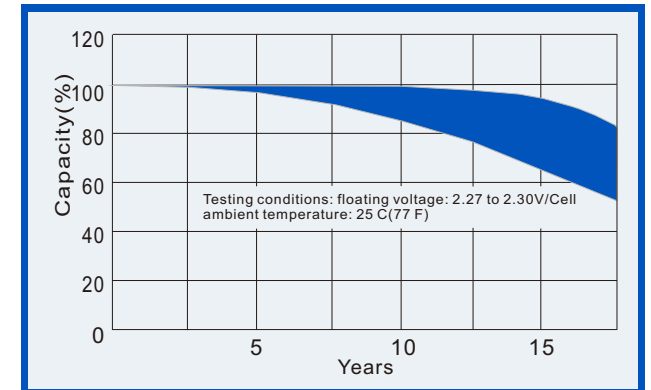
Effect of Temperature on capacity



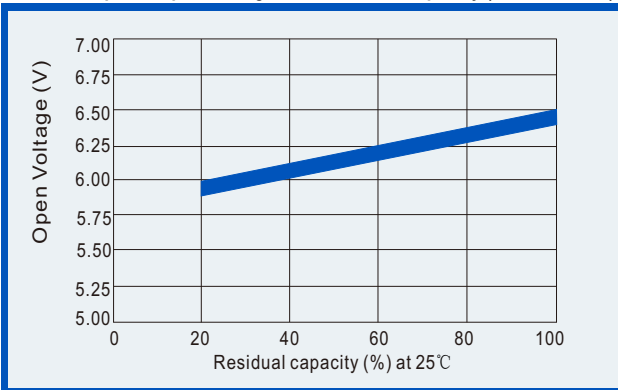
Self-discharge characteristics



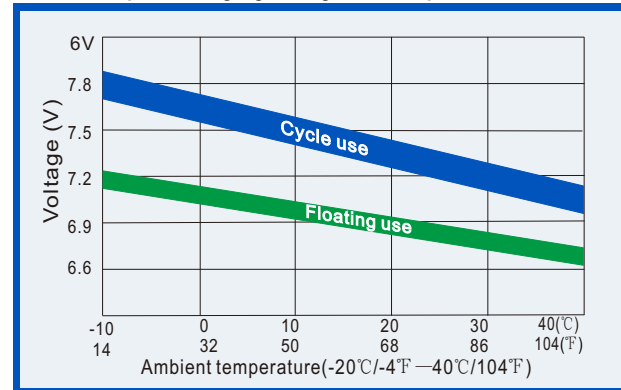
Life Characteristics of float service (25°C, 77°F)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life

