

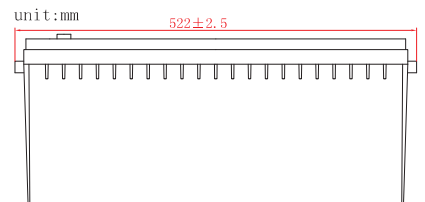
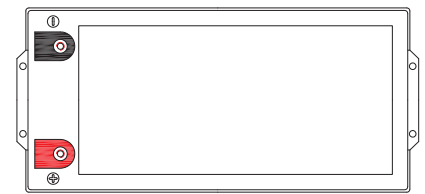
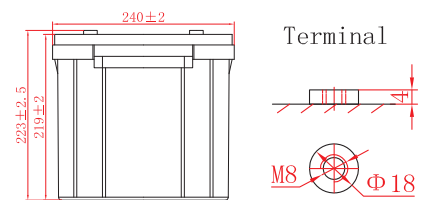
DEEP CYCLE GEL BATTERY

MG200-12



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@ 10hr-rate to 1.80V per cell @25°C (77°F)
Weight	Approx.64.5 kg(142.2lbs)
Maximum Discharge Current	1600A(5sec)
Internal Resistance	Approx. 4.0 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	50 A
Equalization and Cycle Service	14.4 to 14.8VDC/unitAverageat 25°C (77°F)
Self Discharge	MK Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



Dimensions:	Overall Height (H)	Container height (h)	Length (L)	Width (W)
Unit:mm	223±2.5	219±2	522±2.5	240±2

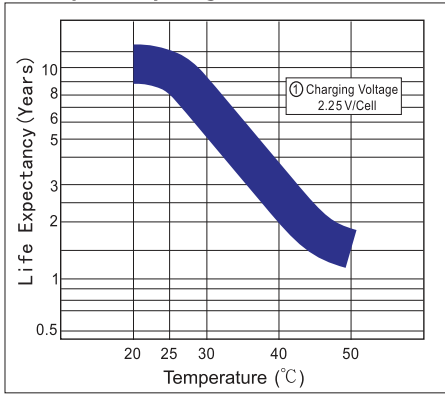
Constant Current Discharge Characteristics Unit: A(25°C/77°F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	211	155	123	53.6	36.2	24.8	20.5	10.9
1.67V	207	152	121	53.2	36.0	24.6	20.5	10.9
1.70V	204	150	119	52.8	35.8	24.6	20.4	10.9
1.75V	197	146	116	51.8	35.2	24.3	20.3	10.8
1.80V	188	141	111	50.0	34.3	23.9	20.0	10.6
1.85V	176	134	103	45.9	31.8	22.8	19.2	10.3

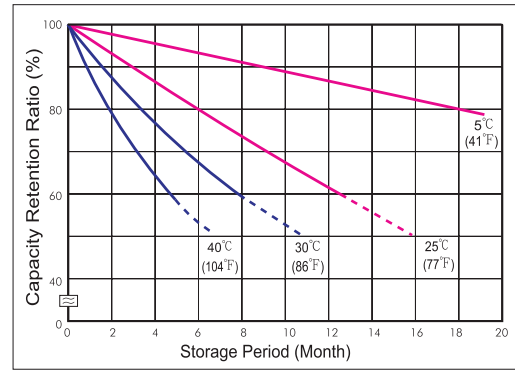
Constant Power Discharge Characteristics Unit: W(25°C/77°F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	348	260	209	100.6	70.6	48.3	40.4	21.5
1.67V	339	253	206	99.6	70.5	48.1	40.3	21.4
1.70V	329	247	204	98.9	70.2	48.0	40.2	21.3
1.75V	310	235	199	97.0	69.4	47.6	39.8	21.1
1.80V	287	219	194	93.6	67.5	46.7	39.2	20.9
1.85V	257	198	183	86.9	63.4	45.2	38.0	20.3

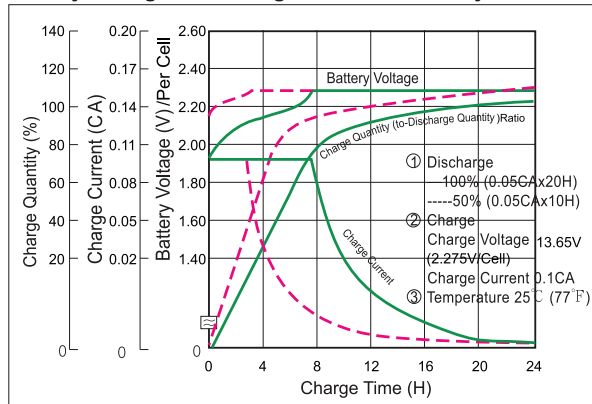
Trickle(or Float)Design Life



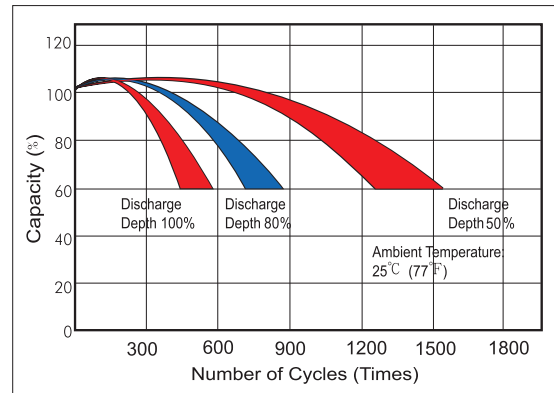
Capacity Retention Characteristic



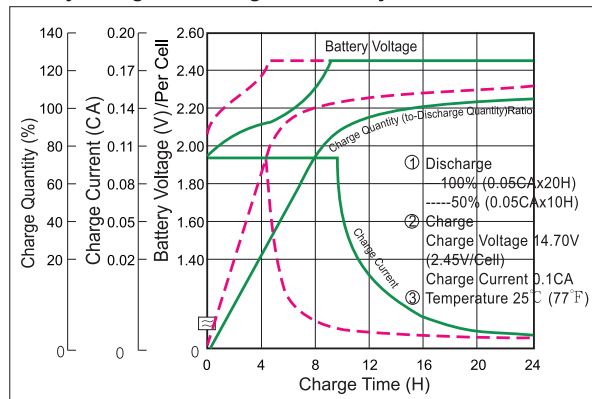
Battery Voltage and Charge Time for Standby Use



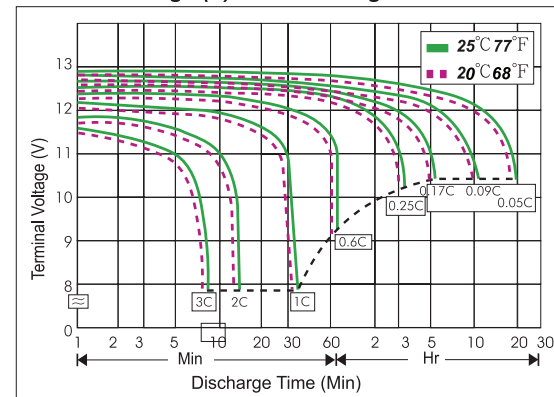
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.25C
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C > (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C

Effect of temperature on capacity (10HR)

Temperature	Dependency of Capacity (10HR)
40°C	102%
25°C	100%
0°C	85%
-15°C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%