



MM120-12 (12V120Ah)

Rechargeable VRLA Battery



FEATURES

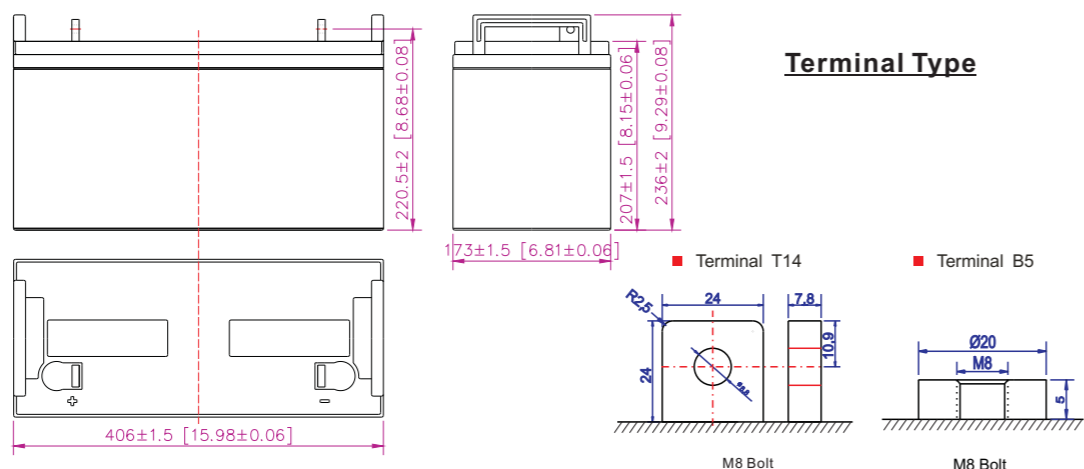
- AGM technology for efficient gas recombination and lower I.R.
- Individually tank-formated plates optimize uniformity of cell
- high performance alloy to secure corrosion-proof feature
- long service life, float or cyclic application
- Maintenance-free operation
- Sealed construction, no electrolyte leakage or spill
- Computer-aided design and manufacturing ensures quality products through control of process and standards

SPECIFICATION

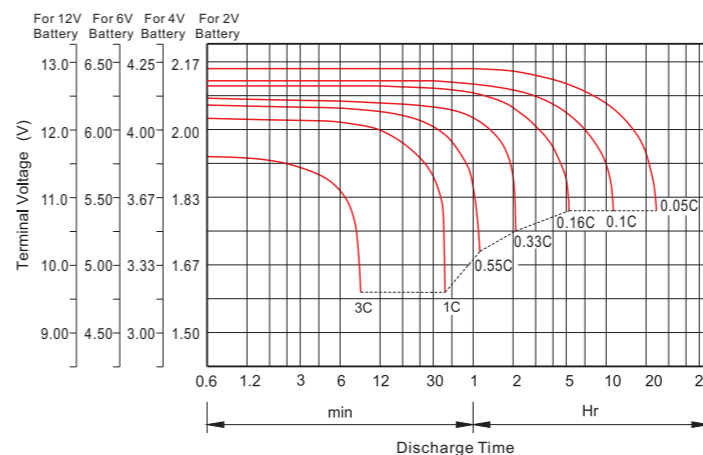
Nominal Voltage	12V	
Nominal Capacity	120Ah@10Hr-rate to 1.8V/cell	
Approx. Weight	36.0Kg (79.37Lbs)	
Internal Resistance	4mΩ(Fully Charged)@25°C	
Self-Discharge	Average 3% of capacity declined per month@25°C	
Nominal Operating Temp.	25±3°C (77±5°F)	
Operating Temp. Range	Discharge: -20°C ~50°C (-4 ~ 122°F)	
	Charge: -15~40°C (5 ~ 104°F)	
	Storage: -20°C ~40°C (-4 ~ 104°F)	
Max. Discharge Current	800A(5 sec.)	
	40°C (104°F)	102%
	25°C (77°F)	100%
	0°C (32°F)	85%
Capacity Affected by Temp.	0°C (32°F)	85%
	-15°C (5°F)	65%
Container Material	ABS(UL94-HB,UL94-V0 is optional)	

OUTER DIMENSION

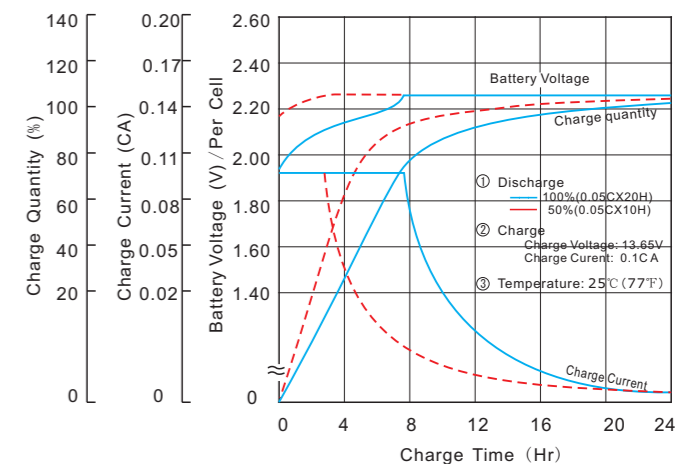
- Length**
406±1.5(15.98±0.06)
- Width**
173±1.5(6.81±0.06)
- Height**
236±2.0(9.29±0.08)
- Total height**
236±2.0(9.29±0.08)



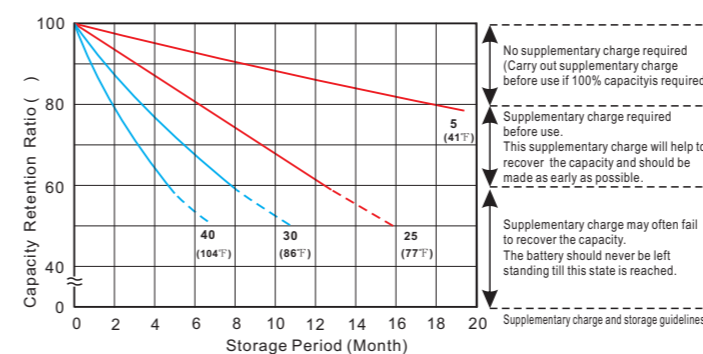
Discharge Characteristics@25



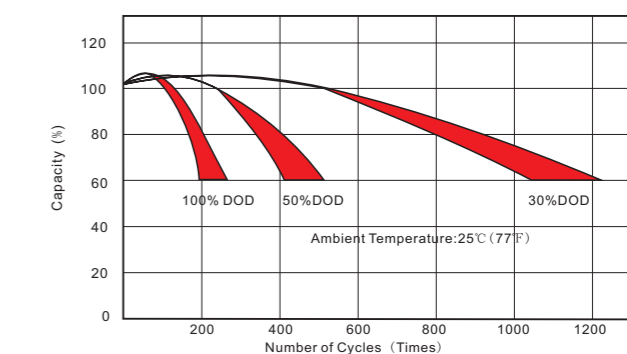
Charge Characteristics(Standby Use)



Capacity Retention Characteristics



Cycle Service life



APPLICATION

- All Purpose
- UPS
- Signal Light
- Alarm and Security System
- DC Power Supply
- Auto Control System

APPLICABLE STANDARDS

- IEC60896-21/22
- JIS C8704
- GB/T19638



Charge Procedure

Application	Constant Voltage Charge(V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.375	2.35~2.40	0.3C
Standby Use	25°C (77°F)	2.275	2.25~2.30	

Note: Temp. Compensation Coefficient of Charge Voltage, Cycle use:-4mV/°C/cell, Standby Use:-3mV/°C/cell

Discharge Retention vs. Discharge Voltage

Final Discharge Voltage(V/cell)	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1C	(A)>1C

Constant Current (CC, Unit:A)&Constant Power(CP, Unit:W) Discharge Table at 25 (77°F)

F.V. (V/cell)	Model	Time	5 Min	10 Min	15 Min	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	8 Hr	10 Hr	20 Hr
			1.60V	CC(A)	382	291	220	136	74	45.2	32.5	26.2	20.5	14.91
	CP(W)	4260	3253	2526	1595	872	534	388	313	246.0	173.0	140.4	78.0	
1.70V	CC(A)	341	276	211	132	72	44.5	31.6	25.6	19.9	14.66	12.24	6.36	
	CP(W)	3802	3095	2425	1544	843	527	376	306	238.4	170.8	138.0	75.6	
1.75V	CC(A)	319	268	205	129	71	44.2	31.6	25.6	19.9	14.54	12.12	6.24	
	CP(W)	3556	3006	2362	1516	837	524	376	306	238.4	169.3	136.8	74.4	
1.80V	CC(A)	311	246	197	126	69	41.4	30.3	24.9	19.6	14.30	12.00	6.00	
	CP(W)	3467	2760	2261	1478	780	489	360	298	234.6	165.7	135.8	72.0	
1.85V	CC(A)	251	192	162	117	68	40.0	28.7	23.6	19.5	13.69	11.76	5.82	
	CP(W)	2430	1890	1735	1262	806	461	330	274	225.4	159.9	132.3	69.0	

Note: The above data are average values, and can be obtained with 3 charge/discharge cycles.

