

MM Series

Medium-size Battery

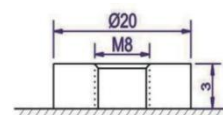
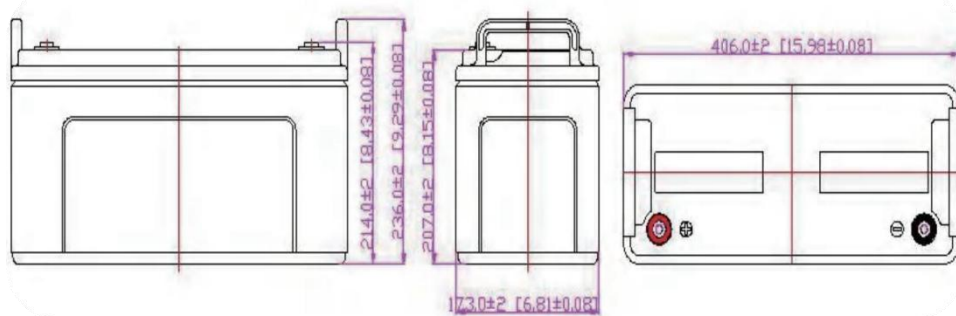
- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: 10 to 12 years (Design life is based on ideal conditions; actual battery lifespan may vary with usage, maintenance, and environment.)
- Cycle use 1: Up to 260 cycles at 100% DOD
- Cycle use 2: Up to 500 cycles at 50% DOD

Application:

- Telecommunications
- Uninterruptible Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

Construction:

- Component.....Raw material
- Positive.....Lead dioxide
- Negative.....Lead
- Container.....UL94-HB
(Optional: UL94-V0)
- Cover.....UL94-HB
(Optional: UL94-V0)
- Sealant.....Epoxy
- Safety valve.....Rubber
- Terminal.....Copper/Pb
- Separator.....Fiber glass
- Electrolyte.....Sulfuric acid



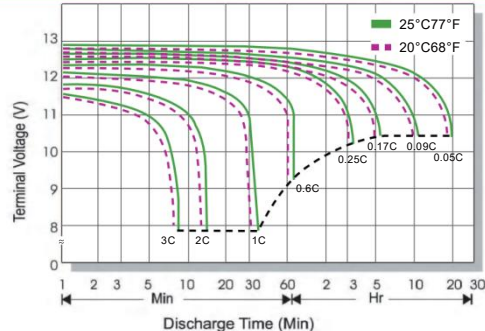
M8 Bolt

B5 Terminal

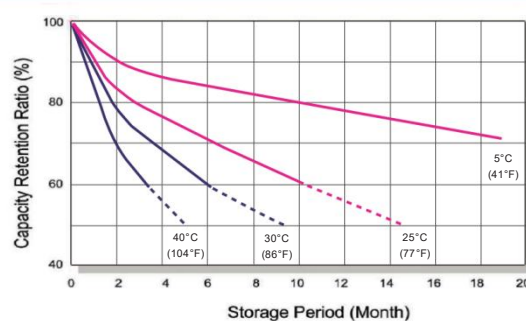
Specification:

Battery Model	MM120-12 12V120AH			
Designed Floating Life	10 to 12 years			
Capacity (25°C)	20HR(6.380A,10.8V)	10HR(12.000A,10.8V)	5HR(19.450A,10.5V)	1HR(66.100A,10.5V)
	127.60 AH	120.00AH	97.25 AH	66.10 AH
Dimensions	Length	Width	Height	Total Height
	406 mm	173 mm	207 mm	236 mm
Approx. Weight	35.50 KG±3%			
Internal Resistance	Full charged at 25°C: ≤ 4.8 mΩ			
Self Discharge	2% of capacity declined per month at (25°C)			
max discharge current	360.8A			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-14.6V(-30mV/°C), max. Current:30.0A		13.5-13.8V (-20mV/°C)	

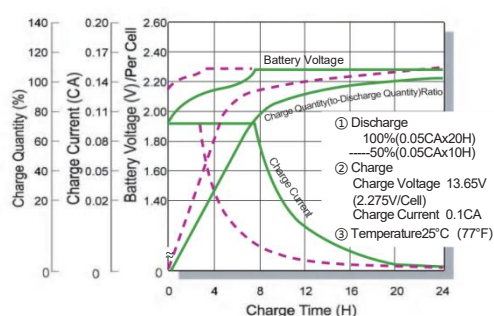
Terminal Voltage (V) and Discharge Time



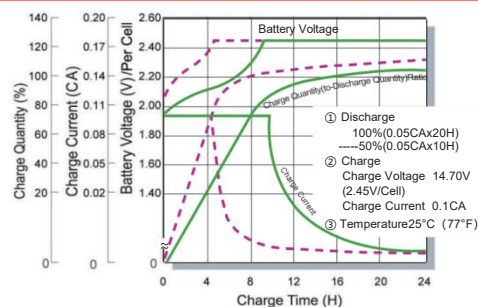
Capacity Retention Characteristic



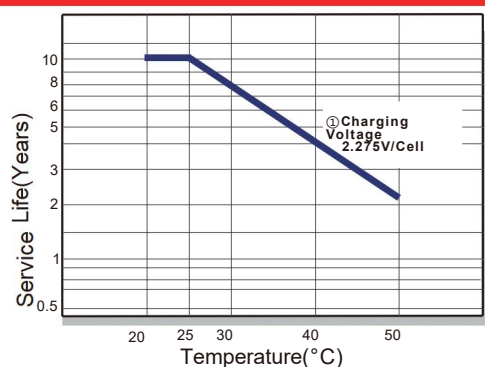
Battery Voltage and Charge Time for Standby Use



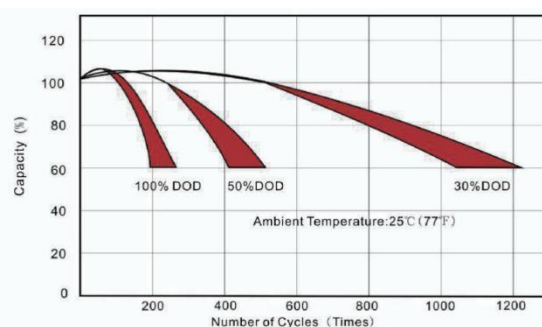
Battery Voltage and Charge Time for Cycle Use



Tickle(or Float) Service Life



Cycle Service Life



Constant Current Discharge (CC, Unit: A) at 25°C (77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/Cell	271.8	190.4	175.8	106.9	65.5	40.88	28.61	24.99	19.28	17.13	12.00	6.38
1.75V/Cell	274.0	206.5	177.3	107.8	66.1	41.23	28.85	25.21	19.45	17.28	12.24	6.47
1.70V/Cell	280.9	221.0	181.7	110.5	67.7	42.26	29.57	25.84	19.93	17.70	12.42	6.57
1.67V/Cell	287.8	226.0	186.1	113.2	69.4	43.29	30.29	26.47	20.42	18.14	12.60	6.66
1.60V/Cell	300.6	234.7	194.5	118.3	72.5	45.21	31.64	27.65	21.33	18.95	12.78	6.76

Constant Power Discharge (CP, Unit: W) at 25°C (77°F)

F.V/Time	5Min	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	10Hr	20Hr
1.80V/Cell	497.4	352.5	327.0	195.6	123.2	77.26	54.65	48.73	37.22	33.24	23.52	12.57
1.75V/Cell	501.5	375.8	329.8	197.3	124.2	77.92	55.09	49.16	37.53	33.52	23.99	12.75
1.70V/Cell	514.0	395.0	338.0	202.2	127.3	79.87	56.47	50.39	38.46	34.34	24.34	12.94
1.67V/Cell	526.6	404.2	351.2	207.2	130.4	81.82	57.86	51.62	39.41	35.19	24.70	13.12
1.60V/Cell	550.1	410.5	361.8	216.4	136.2	85.45	60.42	53.92	41.17	36.76	25.05	13.32