

#### MHB MM Series—Medium-size Battery

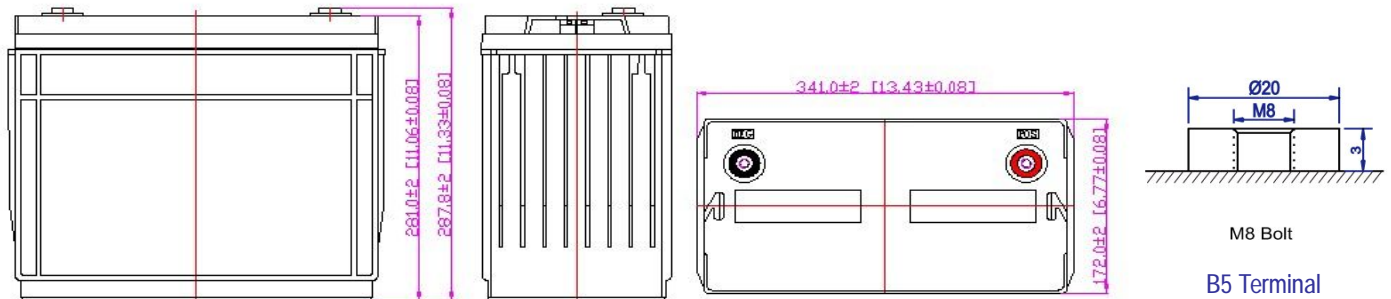
- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 8 years
- Cycle use 1: Up to 260 cycles at 100% DOD
- Cycle use 2: Up to 500 cycles at 50% DOD

#### Application:

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

#### Construction:

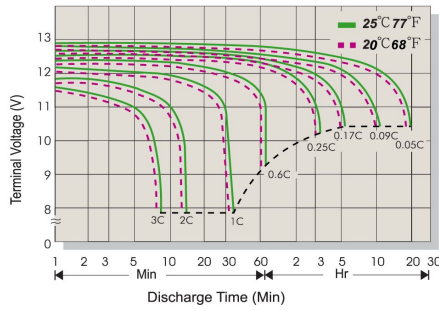
- Component .....Raw material
- Sealant .....Epoxy
- Positive .....Lead dioxide
- Safety valve .... Rubber
- Negative .....Lead
- Terminal .....Copper
- Container .....ABS
- Separator .....Fiber glass
- Cover .....ABS
- Electrolyte ..... Sulfuric acid



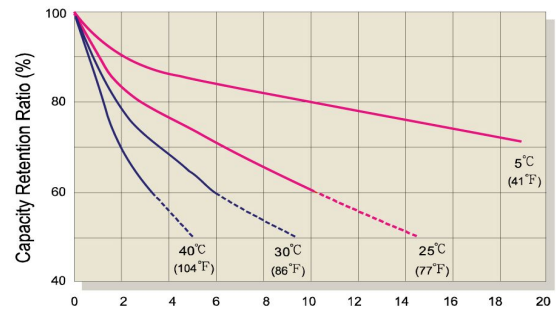
#### Specification:

Battery Model	MM 150-12H 12V150AH			
Designed Floating Life	Up to 8 Years			
Capacity (25°C)	20HR(7.980 A,10.8V)	10HR(15.000A,10.8V)	5HR(27.530A,10.5V)	1HR(84.220A,10.5V)
	159.60 AH	150.00 AH	137.65 AH	84.22 AH
Dimensions	Length	Width	Height	Total Height
	341 mm	172 mm	283 mm	286 mm
Approx. Weight	44.50 KG ±3%			
Internal Resistance	Full charged at 25°C: ≤6.00 mΩ			
Self Discharge	2% of capacity declined per month at (25°C)			
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:45.00A		13.5-13.8V (-20mV/°C)	

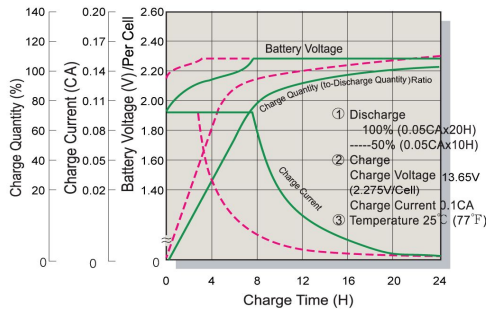
### Terminal Voltage (V) and Discharge Time



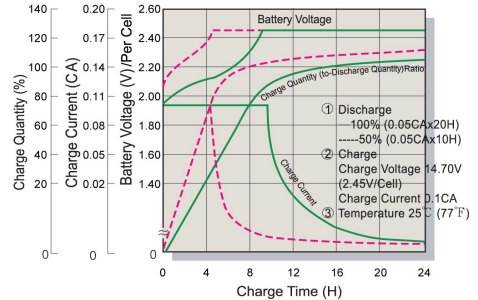
### Capacity Retention Characteristic



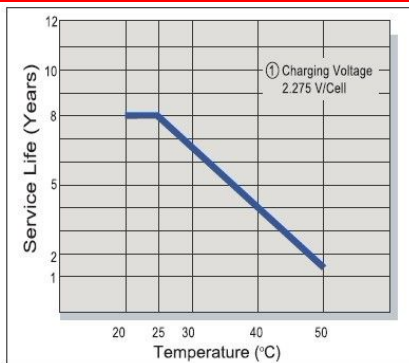
### Battery Voltage and Charge Time for Standby Use



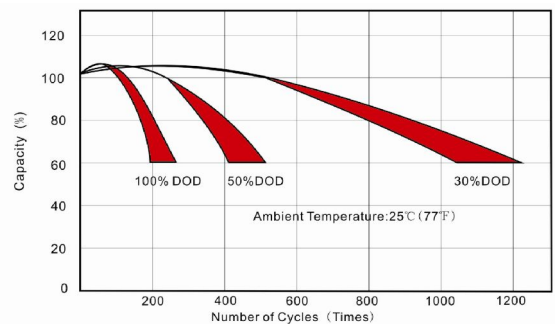
### Battery Voltage and Charge Time for Cycle Use



### 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	497.6	353.2	227.9	136.1	83.52	51.92	41.35	33.67	27.30	17.94	15.00	7.98
1.75V/Cell	501.8	356.2	229.8	137.2	84.22	52.36	41.70	33.95	27.53	18.09	15.23	8.10
1.70V/Cell	514.4	365.1	235.5	140.7	86.33	53.67	42.74	34.80	28.22	18.55	15.45	8.22
1.67V/Cell	526.9	374.0	241.3	144.1	88.43	54.98	43.78	35.65	28.91	19.00	15.68	8.34
1.60V/Cell	550.4	390.6	252.0	150.5	92.37	57.43	45.73	37.24	30.19	19.84	15.90	8.46

### 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	970.4	688.7	444.3	265.4	162.9	101.25	80.63	65.65	53.23	34.99	29.25	15.56
1.75V/Cell	978.6	694.5	448.1	267.6	164.2	102.11	81.31	66.21	53.68	35.28	29.69	15.79
1.70V/Cell	1003	711.9	459.3	274.3	168.3	104.66	83.35	67.86	55.02	36.17	30.13	16.03
1.67V/Cell	1027	729.3	470.5	281.0	172.4	107.21	85.38	69.52	56.37	37.05	30.57	16.26
1.60V/Cell	1073	761.7	491.4	293.5	180.1	111.98	89.18	72.61	58.88	38.70	31.01	16.49