

MHB MM Series—Medium-size Battery

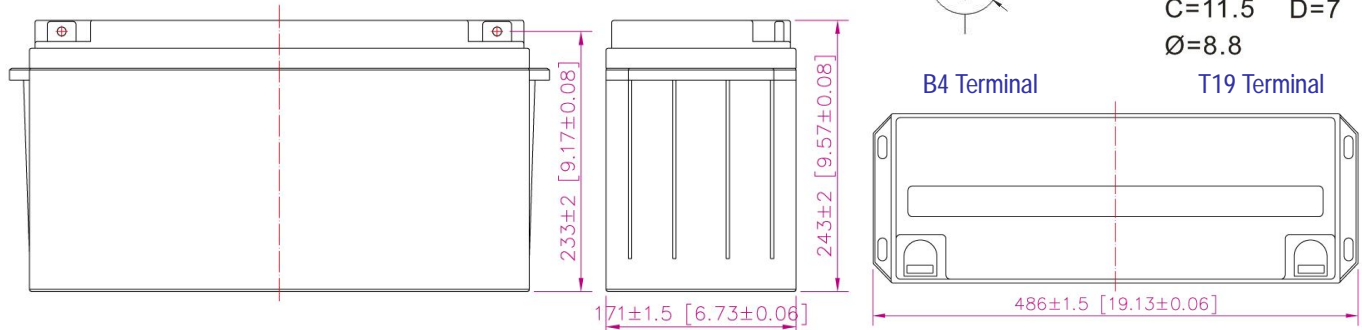
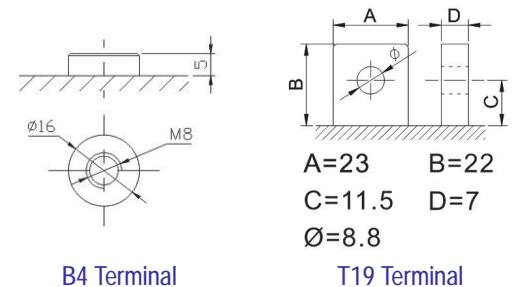
- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 8 years
- Cycle use 1: Up to 260 cycles at 100% DOD
- Cycle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

Application:

- Telecommunications
- Uninterruptable 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:

- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy
- Safety valve Rubber
- TerminalCopper/Pb
- SeparatorFiber glass
- Electrolyte Sulfuric acid

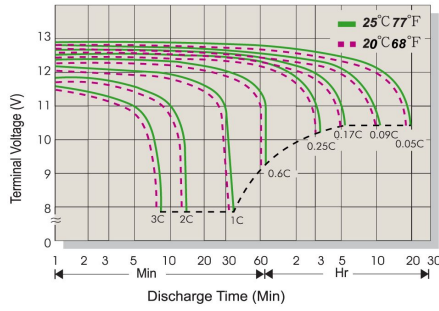


Speification:

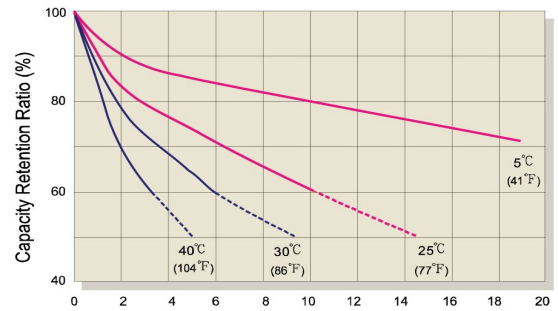
Battery Model	MM 140-12 12V140AH			
Designed Floating Life	Up to 10 Years			
Capacity (25°C)	20HR(7.43A,10.8V)	10HR(14.0A,10.8V)	5HR(27.2A,10.5V)	1HR(91.2A,10.5V)
	148.6AH	140.0AH	27.2AH	91.2AH
Dimensions	Length	Width	Height	Total Height
	486mm (19.13inch)	171mm (6.73inch)	243mm (9.57inch)	243mm (9.57inch)
Approx. Weight	39.80Kg (87.76 lbs)			
Internal Resistance	Full charged at 25°C: ≤6.5mΩ			
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:45.0A		13.6-13.8V (-20mV/°C)	

FUJIAN MINHUA POWER SOURCE CO., LTD.

Terminal Voltage (V) and Discharge Time



Capacity Retention Characteristic



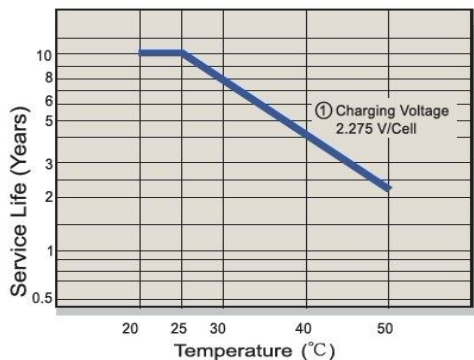
Battery Voltage and Charge Time for Standby Use



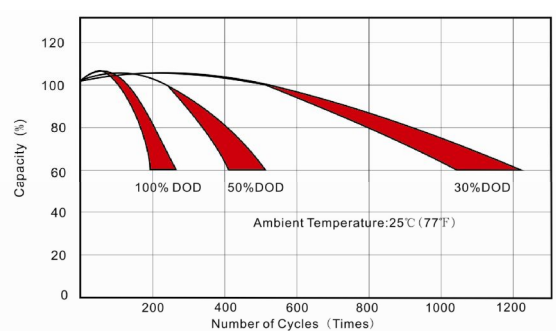
Battery Voltage and Charge Time for Cycle Use



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
1.85V/Cell	497.67	293.78	230.90	150.51	87.84	50.78	38.99	32.02	26.24	21.39	13.75	7.29
1.80V/Cell	507.18	299.39	235.31	153.39	89.52	51.75	39.74	32.63	26.74	21.80	14.00	7.43
1.75V/Cell	516.68	305.01	239.72	156.26	91.20	52.72	40.48	33.24	27.24	22.21	14.28	7.57
1.70V/Cell	563.19	323.31	254.10	162.50	92.80	53.65	41.20	33.83	27.72	22.60	14.53	7.70
1.67V/Cell	620.02	350.76	275.68	171.58	93.80	54.22	41.64	34.19	28.02	22.84	14.69	7.78

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
1.85V/Cell	970.46	572.88	450.25	293.50	171.29	99.02	76.04	62.44	51.17	41.71	26.82	14.22
1.80V/Cell	989.00	583.82	458.86	299.11	174.57	100.91	77.49	63.63	52.14	42.51	27.30	14.49
1.75V/Cell	1007.5	594.76	467.46	304.72	177.84	102.80	78.94	64.82	53.12	43.31	27.85	14.76
1.70V/Cell	1098.1	630.45	495.50	316.87	180.97	104.61	80.33	65.97	54.06	44.07	28.34	15.02
1.67V/Cell	1209.0	683.98	537.58	334.58	182.91	105.73	81.19	66.67	54.63	44.54	28.64	15.18