

#### MHB MR Series—Front Terminal Battery

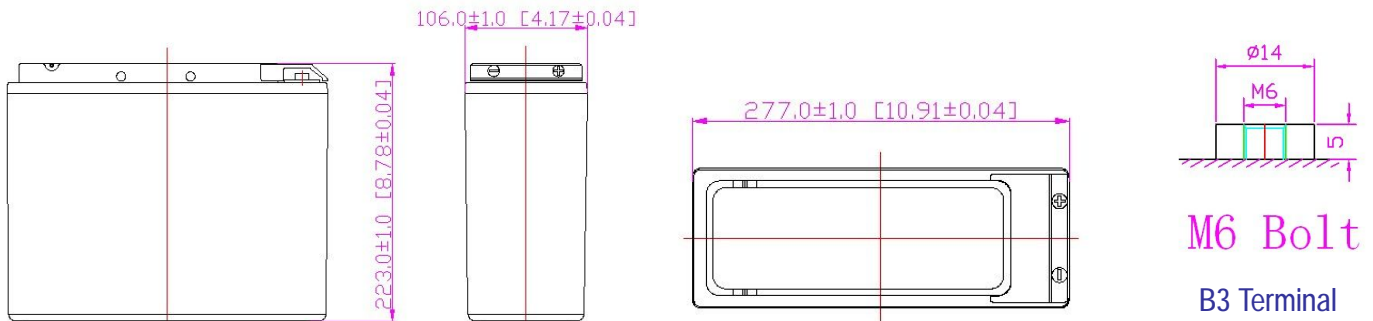
- High performance, completely maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 10 years
- Cycle use 1: Up to 260 cycles at 100% DOD
- Cycle 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

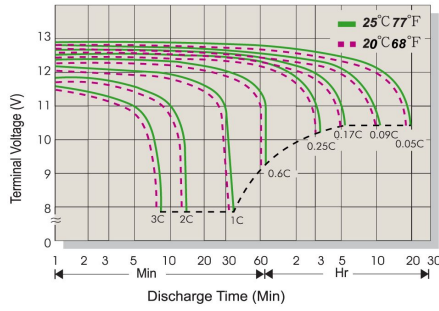


#### Speification:

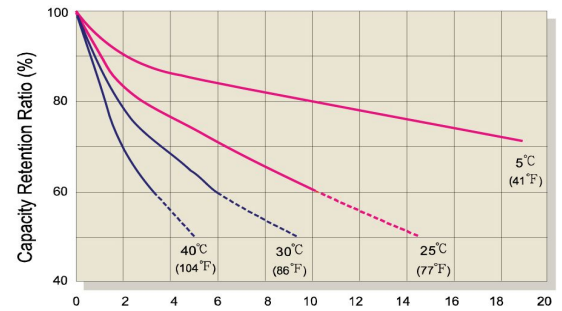
Battery Model	MR50 -12 12V50AH			
Designed Floating Life	Up to 10 Years			
Capacity (25°C)	20HR(2.60A,10.8V)	10HR(5.00A,10.8V)	5HR(9.16A,10.5V)	1HR(30.51A,10.5V)
	52.00AH	50.00AH	45.80AH	30.51AH
Dimensions	Length	Width	Height	Total Height
	277mm (10.91inch)	106mm (4.17inch)	223mm (8.78inch)	223mm (8.78inch)
Approx. Weight	17.20Kg (37.93 lbs)			
Internal Resistance	Full charged at 25°C: ≤7.0mΩ			
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:12.50A		13.6-13.8V (-20mV/°C)	

## FUJIAN MINHUA POWER SOURCE CO., LTD.

### Terminal Voltage (V) and Discharge Time



### Capacity Retention Characteristic



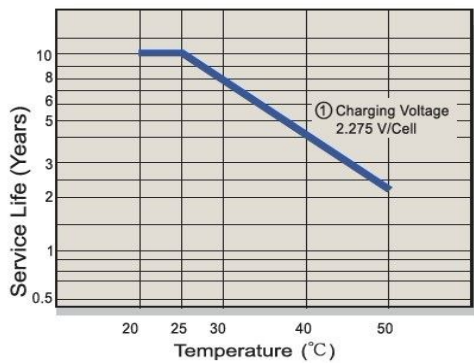
### Battery Voltage and Charge Time for Standby Use



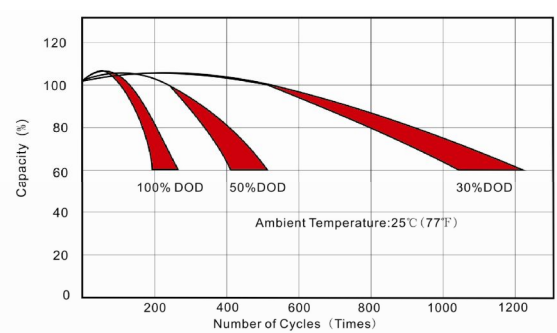
### Battery Voltage and Charge Time for Cycle Use



### Tickle(or Float) Service Life



### Cycle Service Life



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

F.V/Time	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	8Hr	10Hr	20Hr
1.85V/Cell	121.84	67.75	47.76	29.39	17.69	13.16	10.62	8.82	7.60	5.90	4.87	2.53
1.80V/Cell	125.00	69.50	49.00	30.15	18.15	13.50	10.90	9.05	7.80	6.05	5.00	2.60
1.75V/Cell	126.50	70.33	49.59	30.51	18.37	13.66	11.03	9.16	7.89	6.12	5.06	2.63
1.70V/Cell	137.89	74.55	52.56	31.73	18.69	13.90	11.22	9.32	8.03	6.23	5.15	2.68
1.67V/Cell	151.80	80.88	57.03	33.50	18.89	14.05	11.35	9.42	8.12	6.30	5.20	2.71

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

F.V/Time	10Min	15Min	30Min	1Hr	2Hr	3Hr	4Hr	5Hr	6Hr	8Hr	10Hr	20Hr
1.85V/Cell	237.6	132.1	93.1	57.3	34.5	25.7	20.7	17.2	14.8	11.5	9.5	4.9
1.80V/Cell	243.8	135.5	95.6	58.8	35.4	26.3	21.3	17.6	15.2	11.8	9.8	5.1
1.75V/Cell	246.7	137.2	96.7	59.5	35.8	26.6	21.5	17.9	15.4	11.9	9.9	5.1
1.70V/Cell	268.9	145.4	102.5	61.9	36.4	27.1	21.9	18.2	15.7	12.1	10.0	5.2
1.67V/Cell	296.0	157.7	111.2	65.3	36.8	27.4	22.1	18.4	15.8	12.3	10.1	5.3