



MS100-12(12V 100Ah)

Rechargeable VRLA Battery

FEATURES



- AGM technology for efficient gas recombination and lower I.R.
- Individually tank-formed plates optimize uniformity of cell
- High performance alloy to secure corrosion-proof feature
- Long float and cycle life
- Maintenance-free operation
- Sealed construction, no electrolyte leakage or spill
- Computer-aided design and manufacture ensure high quality

SPECIFICATION

Nominal Voltage	12V
Nominal Capacity	100 Ah @ 10Hr-rate
Approx. Weight	28.6KG(62.92Lbs)
Internal Resistance	6.5mΩ (Fully Charged) @25°C
Self-Discharge	Average 3% of capacity decline per month
Nominal Operating Temp.	25±3°C(77±5°F)
Operating Temp. Range	Discharge:-20~50°C(-4~122°F)
	Charge:-15~40°C(5~104°F)
	Storage:-20°C~40°C(-4~104°F)
Max. Discharge Current	800A(5sec.)
	40°C (104°F) 102%
	25°C (77°F) 100%
Capacity Affected by Temp.	0°C (32°F) 85%
	-15°C(5°F) 65%
Container Material	ABS(UL94-HB,UL94-V0 is optional)

APPLICATION

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

APPLICABLE STANDARDS

- IEC61056-1/2
- JIS C8702-2003
- GB/T19639.1-2005



OUTER DIMENSION

Length	330mm(12.99inches)
Width	173mm(6.81inches)
Height	217mm(8.54inches)
Total height	220mm(8.66inches)

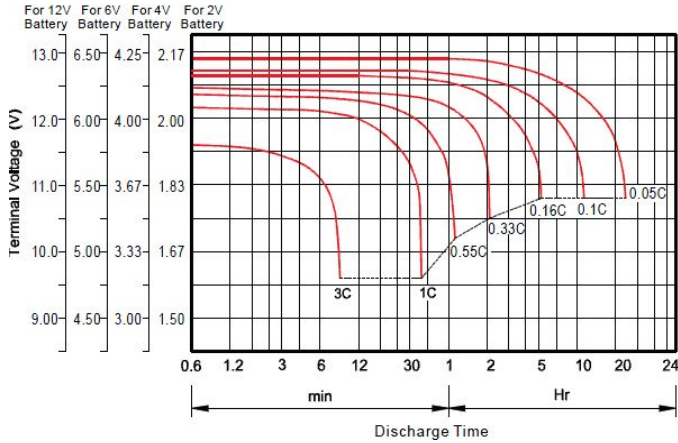
Unit:mm(inches)

Terminal Type

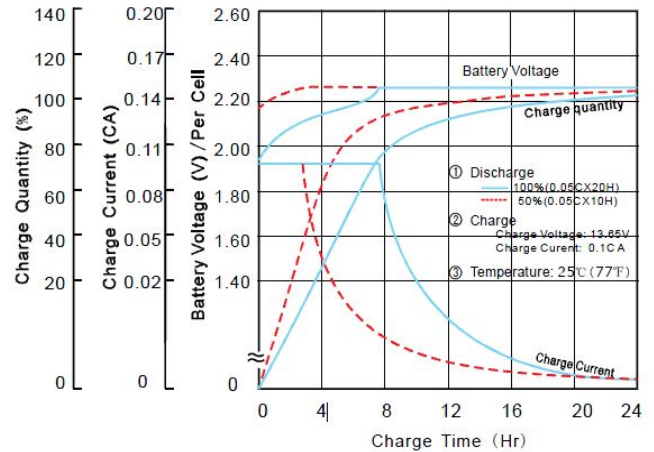
■ Terminal B5 ■ Terminal T13

M8 Bolt M8 Bolt & Nut

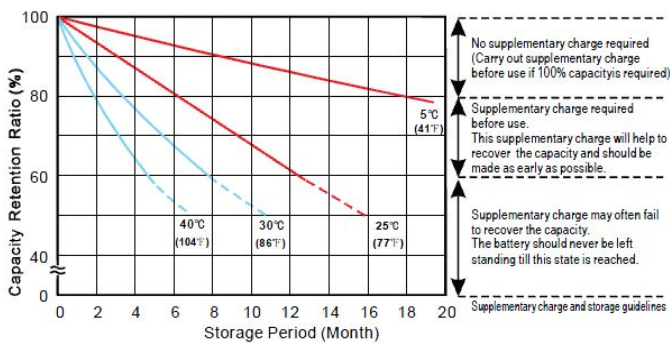
Discharge Characteristics@25°C



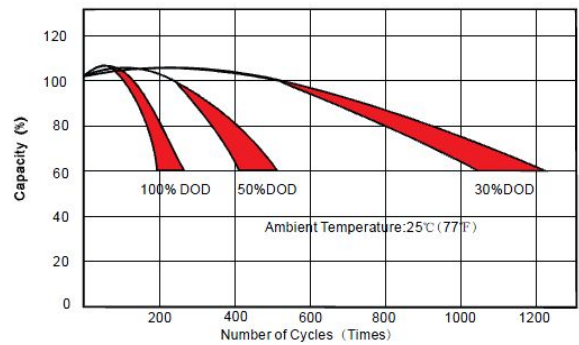
Charge Characteristics(Standby Use)



Capacity Retention Characteristics



Cycle Service life



Charging Procedure

Application	Constact Voltage Charge(V/Cell)			Max. Charge
	Temp.	Set Point	Allowable Range	Current
Cycle Use	25°C	2.375	2.35-2.40	0.3C
Standby Use	25°C	2.275	2.25-2.30	

Discharge Current VS Discharge Voltage

Final Discharge Voltage	1.75	1.7	1.6	1.3
Discharge Current(A)	0.2C > A	0.2C < A < 0.5C	0.5C < A < 1C	A > 1C

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

F.V/Time	5Min	10Min	15Min	30Min	1HR	2HR	3HR	4HR	5HR	6HR	10HR	20HR
1.60V/Cell	318	207	180	104	61.1	34.9	26.1	20.6	17.0	15.6	10.4	5.20
1.65V/Cell	290	199	173	101	58.9	34.0	25.4	20.4	16.8	15.5	10.3	5.15
1.70V/Cell	262	190	165	99	56.7	33.1	24.7	20.2	16.6	15.3	10.2	5.10
1.75V/Cell	235	181	158	94.1	55.6	32.4	24.2	20.0	16.5	15.2	10.1	5.05
1.80V/Cell	213	173	150	90.5	53.5	31.5	23.5	19.8	16.3	15.0	10.0	5.00
1.85V/Cell	205	166	145	87.2	51.4	30.2	22.6	19.0	15.7	14.4	9.60	4.90



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

F.V/Time	5Min	10Min	15Min	30Min	1HR	2HR	3HR	4HR	5HR	6HR	10HR	20HR
1.60 Volt	3622	2364	2053	1187	695	398	297	235	193	178	119	59.3
1.65 Volt	3307	2266	1967	1156	671	388	289	233	191	176	117	58.7
1.70 Volt	2991	2167	1881	1124	646	377	281	230	190	174	116	58.1
1.75 Volt	2674	2068	1796	1073	634	370	276	228	188	173	115	57.6
1.80 Volt	2431	1970	1710	1020	610	359	268	226	186	171	114	57.0
1.85 Volt	2342	1897	1647	994	586	345	257	217	178	164	109	55.8

