



## VRLA Rechargeable Battery

# MSU-800 (MSB-800FR)

## (2V, 800Ah)

### FEATURES

- Sealed structure, no electrolyte leakage or spill.
- High performance alloy to secure corrosion-proof feature.
- Unique electrolyte system achieves maximum service life.
- Special paste formula promotes the good charging acceptance.
- Electrolyte with gel technology.
- 15 years design life floating charging.

### APPLICATION

- UPS
- Central Office
- Telecom
- Energy Storage Systems



### SPECIFICATIONS

Nominal Voltage	2V	
Nominal Capacity(25°C)	10 Hour Rate F.V.(1.80V/cell)	800 Ah
	3 Hour Rate F.V.(1.80V/cell)	600 Ah
	1 Hour Rate F.V.(1.75V/cell)	440 Ah
Approx. Weight	45.0Kg(99.2lbs.)	
Terminals	B6 (Fitting M8 bolt & nut) I3 is optional	
Max. Discharge Current	3200 A (5 sec.)	
Max. Charge Current	200 A	
Operating Temperature Range	Charge	0°C~40°C(32°F~104°F)
	Discharge	-20°C~50°C(-4°F~122°F)
	Storage	-20°C~40°C(-4°F~104°F)
Self Discharge	< 3% per month (25°C)	
Internal Resistance	≤ 0.6mΩ (Fully Charged )	
Container Material	ABS(UL94-HB, UL94-V0 is optional)	




**ISO 9001**



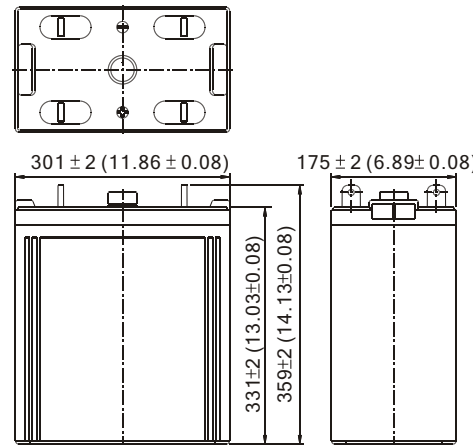
**ISO 14001**



MH19884

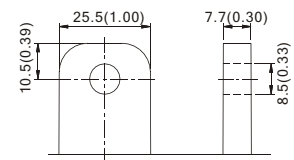
- IEC60896-21/22
- JIS C 8704-2
- GB/T19638.2
- YD/T799

OUTER DIMENSIONS mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
	301±2.0(11.86±0.08)	175±2.0(6.89±0.08)	331±2.0(13.03±0.08)	359±2.0(14.13±0.08)



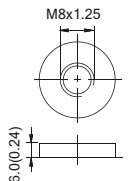
### TERMINAL TYPE

● Terminal B6



(M8 BOLT & NUT)

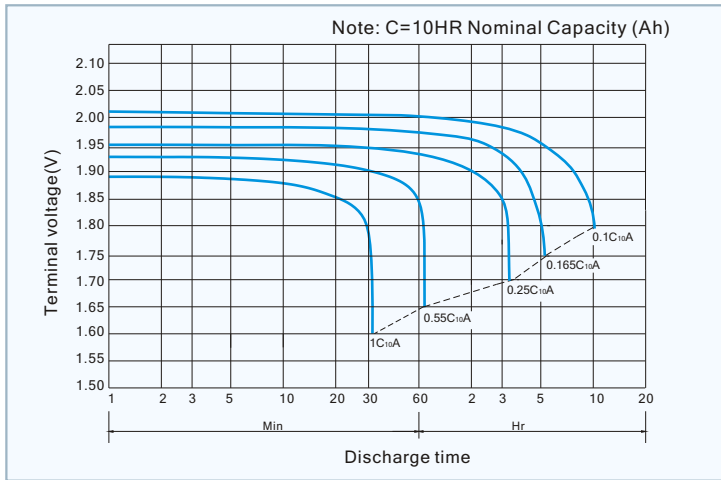
● Terminal I3



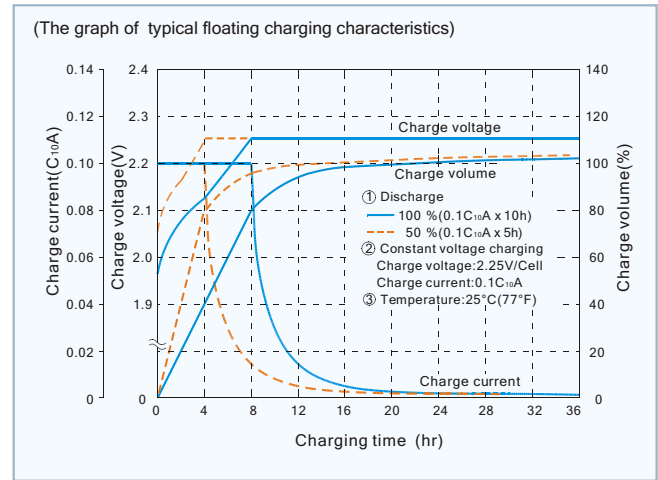
(M8 BOLT)

Terminal Hardware Initial Torque: 10.0 Nm ± 5%

**MSU-800 (MSU-800FR) discharge characteristics (25°C /77°F)**



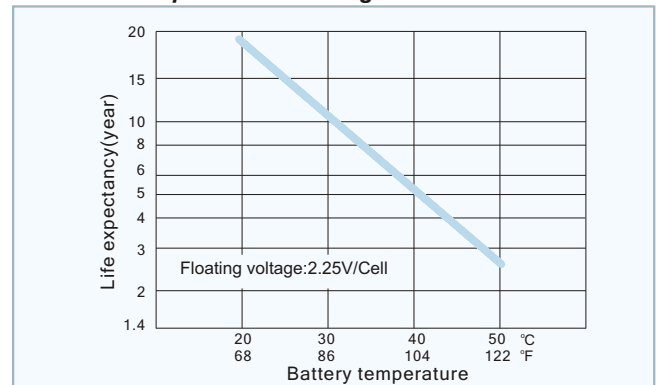
**Battery Charging Characteristics**



**Charging Procedure**

Application	Charging method	Charging Voltage at 25°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Charging time 0.1C <sub>10A</sub> , 25°C (h)	
				100% discharge	50% discharge
For standby power Source	Constant voltage (with current restriction)	2.23~2.25	-3	24	20

**Effect Of Temperature On Long Term Float Life**



**Constant power discharge characteristics at 25 °C/77 °F Unit: W**

F.V. (V/cell) \ Discharge Time	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	12 Hr	20 Hr
1.85V	1049.2	720.0	463.2	360.8	280.4	241.6	215.2	178.0	148.8	128.96	80.35
1.80V	1164.0	792.0	500.0	382.2	308.8	263.2	229.2	190.4	157.5	135.18	84.26
1.75V	1275.2	840.0	530.0	402.4	323.5	275.2	239.2	196.4	164.5	139.82	86.77
1.70V	1400.0	896.0	548.0	416.1	330.0	282.0	245.2	200.4	170.0	143.08	88.20
1.65V	1504.0	924.0	556.0	424.6	336.8	286.0	250.0	204.0	172.4	145.10	88.95
1.60V	1534.0	932.0	564.0	428.6	340.8	290.0	251.2	206.4	174.0	145.78	89.20

**Constant current discharge characteristics at 25 °C/77 °F Unit: A**

F.V. (V/cell) \ Discharge Time	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	12 Hr	20 Hr
1.85V	560.0	384.0	244.0	188.6	148.0	125.2	108.0	88.0	74.8	64.83	40.39
1.80V	624.0	424.0	264.0	200.0	163.2	136.0	116.0	96.8	80.0	68.67	42.80
1.75V	689.2	452.0	281.2	211.8	171.2	144.0	124.0	101.2	84.4	71.74	44.52
1.70V	764.0	484.8	293.2	220.7	175.6	148.8	128.0	104.8	87.6	73.73	45.80
1.65V	818.0	504.4	301.2	228.0	180.0	152.8	132.8	108.0	89.2	74.68	46.40
1.60V	860.0	517.2	310.0	232.9	183.2	155.2	134.0	110.0	90.0	75.38	46.52

All data shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.

A/4 REV. Jan. 2011

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