



## VRLA Rechargeable Battery

# MSU-2500 (2V, 2500Ah)

### 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



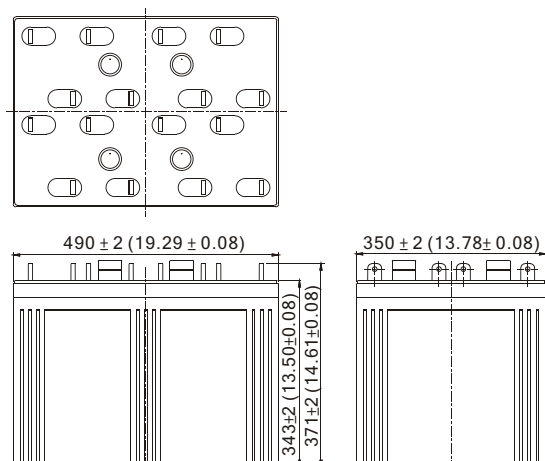
### SPECIFICATIONS

Nominal Voltage	2V	
Nominal Capacity(25°C)	10 Hour Rate F.V.(1.80V/cell)	2500 Ah
	3 Hour Rate F.V.(1.80V/cell)	1875 Ah
	1 Hour Rate F.V.(1.75V/cell)	1375 Ah
Approx. Weight	144.0Kg(317.46lbs.)	
Terminals	B6 (Fitting M8 bolt & nut)	
Max. Discharge Current	8000 A (5 sec.)	
Max. Charge Current	625 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	≤ 0.4mΩ (Fully Charged )	
Container Material	Standard: ABS( UL 94-HB) MSU-2500 Optional: Flame Retardant ABS(UL 94-V0) MSU-2500FR	



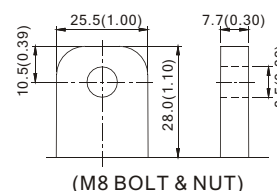
- IEC60896-21/22
- JIS C 8704-2
- GB/T19638.2
- YD/T799

OUTER DIMENSIONS mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
	490±2.0(19.29±0.08)	350±2.0(13.78±0.08)	343±2.0(13.50±0.08)	371±2.0(14.61±0.08)



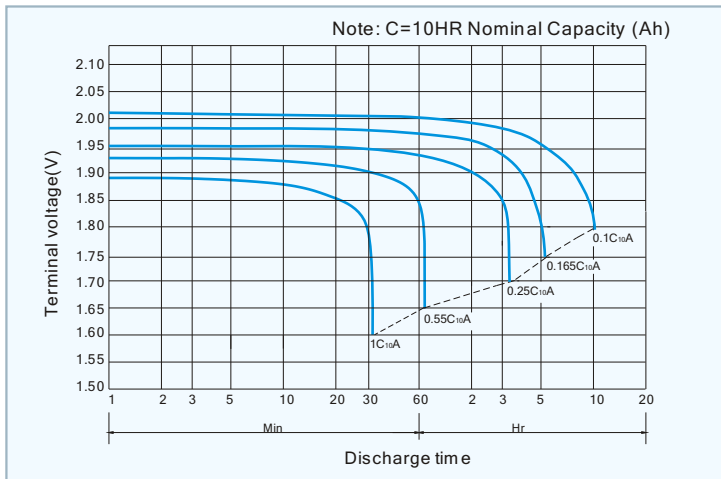
### TERMINAL TYPE

- Terminal B6

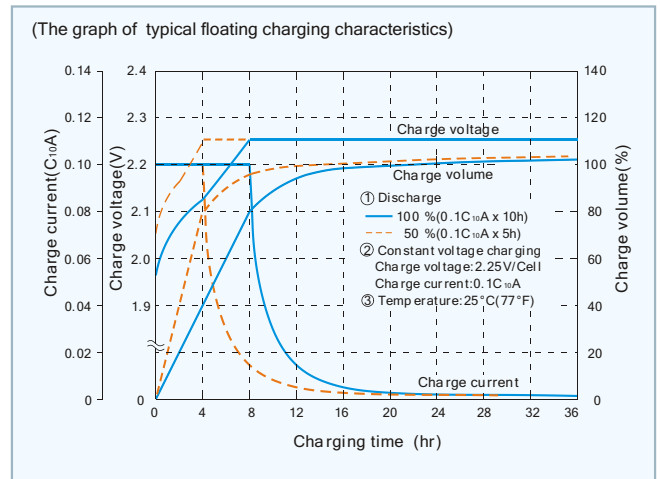


Terminal Hardware Initial Torque: 10.0 Nm ± 5%

### MSU-2500 (MSU-2500FR) discharge characteristics (25°C/77°F)



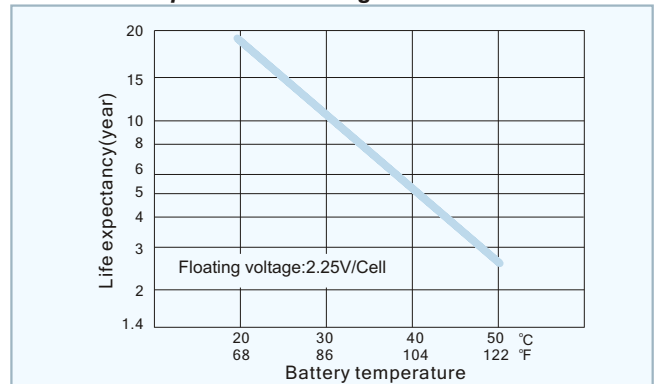
### Battery Charging Characteristics



### 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	3278.8	2250.0	1447.5	1127.4	876.3	755.0	672.5	556.3	465.0	403.0	251.1
1.80V	3637.5	2475.0	1562.5	1194.3	965.0	822.5	716.3	595.0	492.2	422.5	263.3
1.75V	3985.0	2625.0	1656.3	1257.5	1011.0	860.0	747.5	613.8	514.0	436.9	271.2
1.70V	4375.0	2800.0	1712.5	1300.4	1031.3	881.3	766.3	626.3	531.3	447.1	275.6
1.65V	4700.0	2887.5	1737.5	1326.9	1052.5	893.8	781.3	637.5	538.8	453.4	278.0
1.60V	4793.8	2912.5	1762.5	1339.5	1065.0	906.3	785.0	645.0	543.8	455.6	278.7

### 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	1750.0	1200.0	762.5	589.5	462.5	391.4	337.5	275.0	233.8	202.6	126.2
1.80V	1950.0	1325.0	825.0	624.9	510.0	425.0	362.5	302.5	250.0	214.6	133.8
1.75V	2153.8	1412.5	878.8	661.8	535.0	450.0	387.5	316.3	263.8	224.2	139.1
1.70V	2387.5	1515.0	916.3	689.7	548.8	465.0	400.0	327.5	273.8	230.4	143.1
1.65V	2556.3	1576.3	941.3	712.7	562.5	477.5	415.0	337.5	278.8	233.4	145.0
1.60V	2687.5	1616.3	968.8	727.9	572.5	485.0	418.8	343.8	281.3	235.5	145.4

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

For operation, please refer to the instruction from technical manual.

A/0 REV. Jan. 2016

**USA:**  
B&B BATTERY(USA) INC.  
6415 RANDOLPH ST.COMMERCE, CA,90040 U.S.A.  
TEL:1-323-278-1900.1-800-278-8599  
FAX:1-323-278-1268  
E-Mail:sales@bb-battery.com

**CHINA FACTORY:**  
B. B. BATTERY CO., LTD.  
CHENG DONG TRIAL AREA,HUANG GANG,  
RAOPING, GUANG DONG,CHINA,515700  
TEL:86-768-7601001-2  
FAX:86-768-7601469  
E-Mail:maggy@bb-battery.com

**EUROPE:**  
B&B BATTERY(EUROPE) B.V.  
SUITE 8, HAAKSBERGWEG 33, 1101  
BP AMSTERDAM, THE NETHERLANDS  
TEL: 31-30-320-0190  
MOBILE: 852-9128-2711  
E-Mail: dliu@bb-battery.com

**HONG KONG:**  
B&B BATTERY(Hong Kong) Co.  
TEL:852-2311-4918  
FAX:852-2739-1182  
E-Mail:bbhk@hkstar.com

**JAPAN:**  
B&B BATTERY(JAPAN) CO., LTD.  
1375-11 NARAHARA-MACHI,HACHIOJI,  
TOKYO 193-0803,JAPAN.  
TEL:81-426-25-6375  
FAX:81-426-25-6375  
E-Mail:miyata@bb-battery.com

**TAIWAN:**  
B. B. BATTERY(TAIWAN) CO., LTD.  
TEL:886-6-502-5150  
FAX:886-6-589-8087  
E-Mail:kevinlin@bb-battery.com