

## VRLA Rechargeable Battery

# MSB-500 (MSB-500FR)

## (2V, 500Ah)



### FEATURES

- Sealed structure, no electrolyte leakage or spill.
- High performance alloy to secure corrosion-proof feature.
- Unique electrolyte system achieves maximum service life.
- Low self-discharge rate, lower than 3% capacity loss per month.
- Special paste formula promotes the good charging acceptance.
- Electrolyte with gel technology.

### APPLICATION

- Telecom
- UPS
- Central Office
- Energy Storage Systems



### SPECIFICATIONS

Nominal Voltage	2 V
Nominal Capacity	500Ah @ 10 hour rate F.V.(1.80V/cell)
Approx. Weight	36.0Kg(79.4lbs.)
Terminals	B6 (Fitting M8 bolt & nut) I3 is optional
Internal Resistance	≤ 0.8m Ω (Fully Charged)
Max. Discharge Current	2200 A (5 sec.)
Max. Charge Current	125 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)
Safety Valve	Opening pressure 10~35 kPa
Container Material	ABS(UL94-HB, UL94-V0 is optional)

ISO 9001	
ISO14001	
UL	
TLC	
TSE	
● IEC60896-21/22	
● JIS C 8704-2	
● GB/T19638.2	
● YD/T799	

### DIMENSION(mm/inch)

### OUTER DIMENSIONS

### TERMINAL TYPE

#### Length

241±2.0 (9.49±0.08)

#### Width

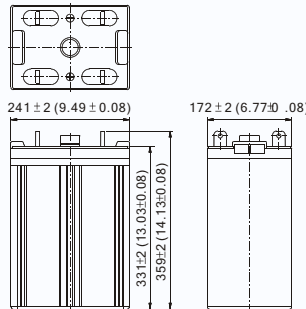
172±2.0 (6.77±0.08)

#### Container Height

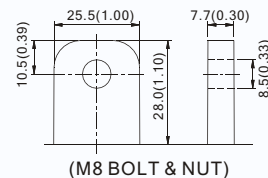
331±2.0 (13.03±0.08)

#### Total Height

359±2.0 (14.13±0.08)

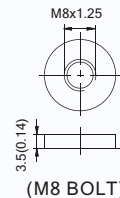


#### Terminal B6



(M8 BOLT & NUT)

#### Terminal I3



(M8 BOLT)

Terminal Hardware Initial Torque: 10.0 Nm ± 5%

### 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	655.8	450.0	289.5	225.5	175.3	151.0	134.5	111.3	93.0	80.60	50.22
1.80V	727.5	495.0	312.5	238.9	193.0	164.5	143.3	119.0	98.4	84.49	52.66
1.75V	797.0	525.0	331.3	251.5	202.2	172.0	149.5	122.8	102.8	87.39	54.23
1.70V	875.0	560.0	342.5	260.1	206.3	176.3	153.3	125.3	106.3	89.43	55.13
1.65V	940.0	577.5	347.5	265.4	210.5	178.8	156.3	127.5	107.8	90.69	55.59
1.60V	958.8	582.5	352.5	267.9	213.0	181.3	157.0	129.0	108.8	91.11	55.75

### 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	350.0	240.0	152.5	117.9	92.5	78.3	67.5	55.0	46.8	40.52	25.25
1.80V	390.0	265.0	165.0	125.0	102.0	85.0	72.5	60.5	50.0	42.92	26.75
1.75V	430.8	282.5	175.8	132.4	107.0	90.0	77.5	63.3	52.8	44.84	27.83
1.70V	477.5	303.0	183.3	137.9	109.8	93.0	80.0	65.5	54.8	46.08	28.63
1.65V	511.3	315.3	188.3	142.5	112.5	95.5	83.0	67.5	55.8	46.67	29.00
1.60V	537.5	323.3	193.8	145.6	114.5	97.0	83.8	68.8	56.3	47.11	29.08

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