



## VRLA Rechargeable Battery

# MSB-3000 (MSB-3000FR)

## (2V, 3000Ah)



### 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	3000Ah @ 10 hour rate F.V.(1.80V/cell)
Approx. Weight	215.0Kg(473.9lbs.)
Terminals	B6 (Fitting M8 bolt & nut)
Internal Resistance	≤ 0.3m Ω (Fully Charged )
Max. Discharge Current	9000 A (5 sec.)
Max. Charge Current	750 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
<b>Length</b> 710±2.0 (27.95±0.08)		<b>Terminal B6</b> 
<b>Width</b> 353±2.0 (13.90±0.08)		(M8 BOLT & NUT) Terminal Hardware Initial Torque: 10.0 Nm ± 5%
<b>Container Height</b> 341±2.0 (13.43±0.08)		
<b>Total Height</b> 369±2.0 (14.53±0.08)		

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	3934.5	2700.0	1737.0	1352.9	1051.6	906.0	807.0	667.5	558.0	483.60	301.32	
1.80V	4365.0	2970.0	1875.0	1433.2	1158.0	987.0	859.5	714.0	590.6	506.94	315.98	
1.75V	4782.0	3150.0	1987.5	1508.9	1213.2	1032.0	897.0	736.5	616.8	524.32	325.39	
1.70V	5250.0	3360.0	2055.0	1560.5	1237.5	1057.5	919.5	751.5	637.5	536.56	330.75	
1.65V	5640.0	3465.0	2085.0	1592.3	1263.0	1072.5	937.5	765.0	646.5	544.14	333.55	
1.60V	5752.5	3495.0	2115.0	1607.4	1278.0	1087.5	942.0	774.0	652.5	546.66	334.49	

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	2100.0	1440.0	915.0	707.4	555.0	469.7	405.0	330.0	280.5	243.10	151.47	
1.80V	2340.0	1590.0	990.0	750.0	612.0	510.0	435.0	363.0	300.0	257.50	160.50	
1.75V	2584.5	1695.0	1054.5	794.1	642.0	540.0	465.0	379.5	316.5	269.03	166.95	
1.70V	2865.0	1818.0	1099.5	827.7	658.5	558.0	480.0	393.0	328.5	276.49	171.75	
1.65V	3067.5	1891.5	1129.5	855.2	675.0	573.0	498.0	405.0	334.5	280.04	174.00	
1.60V	3225.0	1939.5	1162.5	873.5	687.0	582.0	502.5	412.5	337.5	282.66	174.45	

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