



## VRLA Rechargeable Battery

# MSB-1000 (2V, 1000Ah)



### 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	1000Ah @ 10 hour rate F.V.(1.80V/cell)
Approx. Weight	72.0Kg(158.7lbs.)
Terminals	B6 (Fitting M8 bolt & nut) I3 is optional
Internal Resistance	≤ 0.5m Ω (Fully Charged )
Max. Discharge Current	4000 A (5 sec.)
Max. Charge Current	250 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	Standard: ABS( UL 94-HB) MSB-1000 Optional: Flame Retardant ABS(UL 94-V0) MSB-1000FR



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

### DIMENSION(mm/inch)

### OUTER DIMENSIONS

### TERMINAL TYPE

#### Length

475±2.0 (18.70±0.08)

#### Width

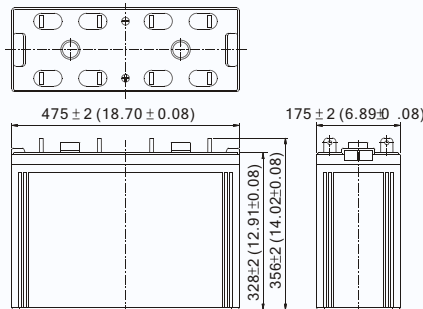
175±2.0 (6.89±0.08)

#### Container Height

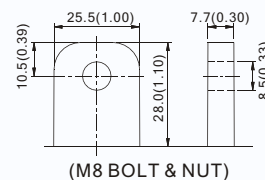
328±2.0 (12.91±0.08)

#### Total Height

356±2.0 (14.02±0.08)

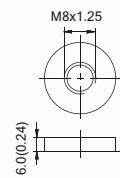


#### Terminal B6



(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	1311.5	900.0	579.0	451.0	350.5	302.0	269.0	222.5	186.0	161.20	100.44
1.80V	1455.0	990.0	625.0	477.7	386.0	329.0	286.5	238.0	196.9	168.98	105.33
1.75V	1594.0	1050.0	662.5	503.0	404.4	344.0	299.0	245.5	205.6	174.77	108.46
1.70V	1750.0	1120.0	685.0	520.2	412.5	352.5	306.5	250.5	212.5	178.85	110.25
1.65V	1880.0	1155.0	695.0	530.8	421.0	357.5	312.5	255.0	215.5	181.38	111.18
1.60V	1917.5	1165.0	705.0	535.8	426.0	362.5	314.0	258.0	217.5	182.22	111.50

### 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	700.0	480.0	305.0	235.8	185.0	156.6	135.0	110.0	93.5	81.03	50.49
1.80V	780.0	530.0	330.0	250.0	204.0	170.0	145.0	121.0	100.0	85.83	53.50
1.75V	861.5	565.0	351.5	264.7	214.0	180.0	155.0	126.5	105.5	89.68	55.65
1.70V	955.0	606.0	366.5	275.9	219.5	186.0	160.0	131.0	109.5	92.16	57.25
1.65V	1022.5	630.5	376.5	285.1	225.0	191.0	166.0	135.0	111.5	93.35	58.00
1.60V	1075.0	646.5	387.5	291.2	229.0	194.0	167.5	137.5	112.5	94.22	58.15

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