



## VRLA Rechargeable Battery

# MSB-300 (MSB-300FR) (2V, 300Ah)



### 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	300Ah @ 10 hour rate F.V.(1.80V/cell)
Approx. Weight	21.2Kg(46.7lbs.)
Terminals	B6 (Fitting M8 bolt & nut) I3 is optional
Internal Resistance	$\leq 1.0\text{m}\Omega$ (Fully Charged )
Max. Discharge Current	1350 A (5 sec.)
Max. Charge Current	75 A
Operating Temperature Range	Charge : $0^{\circ}\text{C}\sim 40^{\circ}\text{C}(32^{\circ}\text{F}\sim 104^{\circ}\text{F})$ Discharge : $-20^{\circ}\text{C}\sim 50^{\circ}\text{C}(-4^{\circ}\text{F}\sim 122^{\circ}\text{F})$ Storage : $-20^{\circ}\text{C}\sim 40^{\circ}\text{C}(-4^{\circ}\text{F}\sim 104^{\circ}\text{F})$
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

171 $\pm$ 2.0 (6.73 $\pm$ 0.08)

#### Width

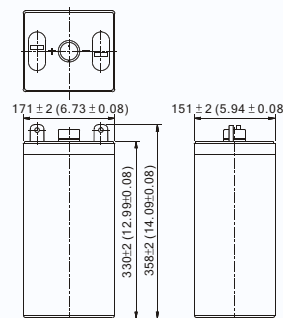
151 $\pm$ 2.0 (5.94 $\pm$ 0.08)

#### Container Height

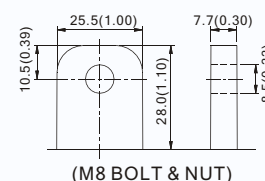
330 $\pm$ 2.0 (12.99 $\pm$ 0.08)

#### Total Height

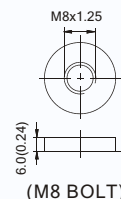
358 $\pm$ 2.0 (14.09 $\pm$ 0.08)



#### Terminal B6



#### Terminal I3



Terminal Hardware Initial Torque: 10.0 Nm  $\pm$  5%

### Constant power discharge characteristics at 25 °C/77 °F

Unit: W

Discharge Time F.V. (V/cell)	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	12 Hr	20 Hr
1.85V	393.5	270.0	173.7	135.3	105.2	90.6	80.7	66.8	55.8	48.36	30.13
1.80V	436.5	297.0	187.5	143.3	115.8	98.7	86.0	71.4	59.1	50.69	31.60
1.75V	478.2	315.0	198.8	150.9	121.3	103.2	89.7	73.7	61.7	52.43	32.54
1.70V	525.0	336.0	205.5	156.0	123.8	105.8	92.0	75.2	63.8	53.66	33.08
1.65V	564.0	346.5	208.5	159.2	126.3	107.3	93.8	76.5	64.7	54.41	33.35
1.60V	575.3	349.5	211.5	160.7	127.8	108.8	94.2	77.4	65.3	54.67	33.45

### Constant current discharge characteristics at 25 °C/77 °F

Unit: A

Discharge Time F.V. (V/cell)	30 Min	1 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	12 Hr	20 Hr
1.85V	210.0	144.0	91.5	70.7	55.5	47.0	40.5	33.0	28.1	24.31	15.15
1.80V	234.0	159.0	99.0	75.0	61.2	51.0	43.5	36.3	30.0	25.75	16.05
1.75V	258.5	169.5	105.5	79.4	64.2	54.0	46.5	38.0	31.7	26.90	16.70
1.70V	286.5	181.8	110.0	82.8	65.9	55.8	48.0	39.3	32.9	27.65	17.18
1.65V	306.8	189.2	113.0	85.5	67.5	57.3	49.8	40.5	33.5	28.00	17.40
1.60V	322.5	194.0	116.3	87.4	68.7	58.2	50.3	41.3	33.8	28.27	17.45

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