



# VRLA Rechargeable Battery

## EB50-12



### FEATURES

- Absorbent Glass Mat technology for efficient gas recombination
- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed for high power & high cyclic usage
- Low self-discharge rate, lower than 3% capacity loss per month

### APPLICATION

- UPS
- E-bike
- Wheelchairs
- Lawn Mowers
- Golf-Carts
- Electrical Scooter



### SPECIFICATIONS

Nominal Voltage	12 V
Nominal Capacity	50Ah @ 20 hour rate F.V.(1.75V/cell)
Approx. Weight	16500g(36.38lbs.)
Terminals	I2 (M6 Female thread)
Internal Resistance	≤6mΩ (Fully Charged )
Max. Discharge Current	750 A (5 sec.)
Max. Charge Current	15 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)
Container Material	Standard: ABS( UL 94-HB) EB50-12 Optional: Flame Retardant ABS(UL 94-V0) EB50-12FR

- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

DIMENSION(mm/inch)	OUTER DIMENSIONS	TERMINAL TYPE
<p>■ <b>Length</b> 197±1.5 (7.76±0.06)</p> <p>■ <b>Width</b> 165±1.5 (6.50±0.06)</p> <p>■ <b>Container Height</b> 171±1.5 (6.73±0.06)</p> <p>■ <b>Total Height</b> 171±1.5 (6.73±0.06)</p>		<p>● Terminal I2</p> <p>[M6 BOLT]</p> <p>Terminal Hardware Initial Torque: I2(5.5Nm±5%)</p>

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

F.V. (V/cell) \ Discharge Time	10 Min	15 Min	30 Min	40 Min	1 Hr	2 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	1346.7	1090.5	685.9	543.8	415.0	228.0	175.0	110.9	56.14	29.36
1.75V	1459.0	1141.7	712.2	563.5	427.0	234.0	178.3	112.3	57.00	30.00
1.70V	1511.7	1176.2	727.8	574.8	434.5	236.4	180.0	113.2	57.29	30.14
1.65V	1547.8	1203.7	738.4	582.8	440.5	238.8	181.7	114.0	57.43	30.21
1.60V	1578.5	1227.4	745.9	588.7	445.0	240.0	182.5	114.0	57.43	30.21
1.50V	1610.2	1251.9	753.4	594.6	449.7	241.2	183.6	114.0	57.43	30.21

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

F.V. (V/cell) \ Discharge Time	10 Min	15 Min	30 Min	40 Min	1 Hr	2 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	118.5	94.8	58.1	45.9	34.9	19.0	14.6	9.24	4.68	2.45
1.75V	128.4	99.3	60.4	47.6	35.9	19.5	14.9	9.36	4.75	2.50
1.70V	133.1	102.3	61.7	48.5	36.5	19.7	15.0	9.43	4.77	2.51
1.65V	136.3	104.7	62.6	49.2	37.0	19.9	15.1	9.50	4.79	2.52
1.60V	139.0	106.7	63.2	49.7	37.4	20.0	15.2	9.50	4.79	2.52
1.50V	141.7	108.9	63.8	50.2	37.8	20.1	15.3	9.50	4.79	2.52

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.  
A/2 REV. Jul. 2013