



# VRLA Rechargeable Battery

## HRL50-12



Measures Technology Values Innovation

### FEATURES

- Maintenance free(no water topping-up required).
- No free acid(Non-spillable battery).
- Low self-discharge rate, lower than 3% capacity loss per month.
- Can be used in any orientation(excluding used inverted).
- The battery is designed for high rate usage.
- Absorbent Glass Mat technology for efficient gas recombination.
- The power density at 5 min~15min discharging rate is 30% higher than BP series.

### APPLICATION

- UPS
- Wheelchairs
- Golf-Carts
- Wind Power
- Medical Equipments
- Jump Starter



### SPECIFICATIONS

Nominal Voltage	12 V
Nominal Capacity	48Ah @ 10 hour rate F.V.(1.75V/cell)
Approx. Weight	15.3Kg(33.74lbs.)
Terminals	B2 (Fitting M5 bolt & nut) , I1 and I2 are optional
Internal Resistance	≤5mΩ (Fully Charged)
Max. Discharge Current	600 A (5 sec.)
Max. Charge Current	14.4 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) HRL50-12 Optional: Flame Retardant ABS(UL 94-V0) HRL50-12FR

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

DIMENSION(mm/inch)	OUTER DIMENSIONS	TERMINAL TYPE
<p>■ Length</p> <p>197±1.5 (7.76±0.06)</p> <p>■ Width</p> <p>165±1.5 (6.50±0.06)</p> <p>■ Container Height</p> <p>171±1.5 (6.73±0.06)</p> <p>■ Total Height</p> <p>171±1.5 (6.73±0.06)</p>		<p>● Terminal B2</p> <p>[M5 BOLT &amp; NUT]</p> <p>● Terminal I1</p> <p>[M5 BOLT &amp; NUT]</p> <p>● Terminal I2</p> <p>[M6 BOLT]</p> <p>Terminal Hardware Initial Torque: B2/I1(4.0Nm±5%),I2(5.5Nm±5%)</p>

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

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	2050.0	1400.0	1014.0	865.0	658.0	500.0	418.0	368.0	202.8
1.70V	2450.0	1563.0	1103.0	916.0	685.0	519.0	431.0	376.0	206.7
1.60V	2625.0	1644.0	1153.0	950.0	700.0	531.0	440.0	383.0	210.0
1.50V	2700.0	1675.0	1178.0	965.0	709.0	538.0	445.0	386.0	211.1
1.40V	2750.0	1698.0	1191.0	974.0	714.0	541.0	449.0	389.0	211.7
1.30V	2775.0	1713.0	1200.0	980.0	718.0	544.0	451.0	390.0	212.2

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

F.V. (V/cell) \ Discharge Time	5 Min	10 Min	15 Min	20 Min	30 Min	40 Min	50 Min	60 Min	120 Min
1.80V	183.04	122.81	87.72	74.19	55.76	42.05	34.98	30.67	16.90
1.70V	222.73	137.11	95.42	78.56	58.05	43.65	36.07	31.33	17.23
1.60V	238.64	144.21	99.74	81.48	59.32	44.66	36.82	31.92	17.50
1.50V	245.45	146.93	101.90	82.76	60.08	45.25	37.24	32.17	17.59
1.40V	250.00	148.95	103.03	83.53	60.51	45.50	37.57	32.42	17.64
1.30V	252.27	150.26	103.81	84.05	60.85	45.75	37.74	32.50	17.68

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