

## VRLA Rechargeable Battery

# BP160-12 (BP160-12FR)

### FEATURES

- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- Flame-arrestor is installed to ensure safety
- Carry handles for easy installation
- Absorbent Glass Mat technology for efficient gas recombination

### APPLICATION

- UPS
- Telecom

### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (8.0A, 10.5V)	160 Ah
	10 Hour Rate (15.2A, 10.5V)	152 Ah
	5 Hour Rate (27.2A, 10.5V)	136 Ah
	1 Hour Rate (96.0A,9.3V)	96 Ah
Approx. Weight	51.2Kg(112.9lbs.)	
Terminals	B9 (Fitting M8 bolt & nut) I3 is optional	
Max. Discharge Current	800 A (5 sec.)	
Max. Charge Current	48 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)
Self Discharge	< 3% per month (25°C)	
Internal Resistance	≤ 2.7mΩ (Fully Charged )	



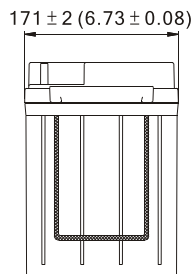
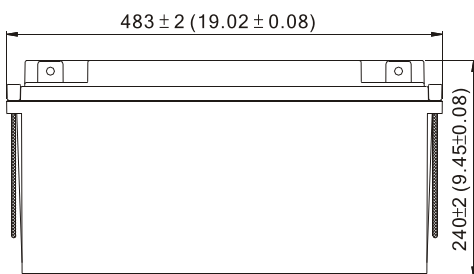
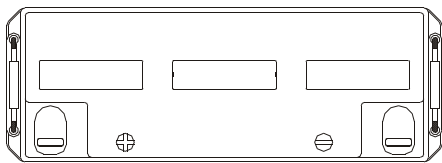
### CONTAINER MATERIAL

- BPS160-12:  
ABS: UL 94-HB (Dark gray color)
- BPS160-12FR:  
ABS: UL 94-V0 (Light gray color)

 ISO 9001  MH19884 UL	 ISO14001  C4M20310-2474-E-16 CE
● IEC60896	● JIS C 8704
● GB/T 19638	

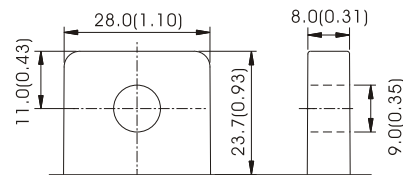
### OUTER DIMENSIONS mm(inch)

Length (L)	Width (W)	Container Height (H)	Total Height (TH)
483±2.0(19.02±0.08)	171±2.0(6.73±0.08)	240±2.0(9.45±0.08)	240±2.0(9.45±0.08)



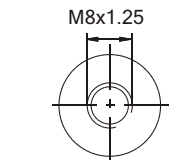
### TERMINAL TYPE

● Terminal B9



(M8 BOLT & NUT)

● Terminal I3

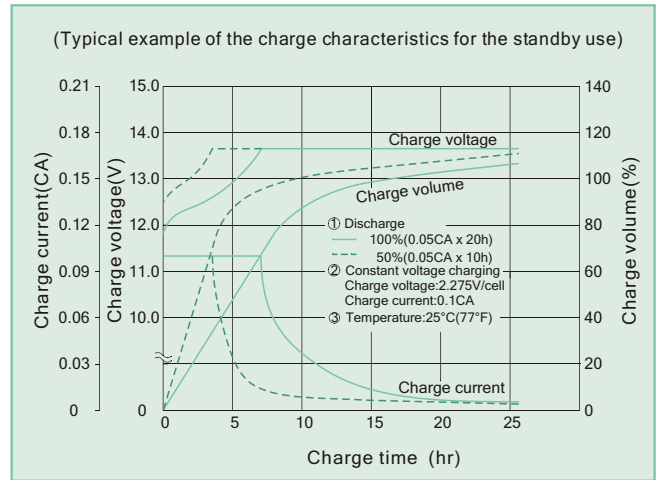
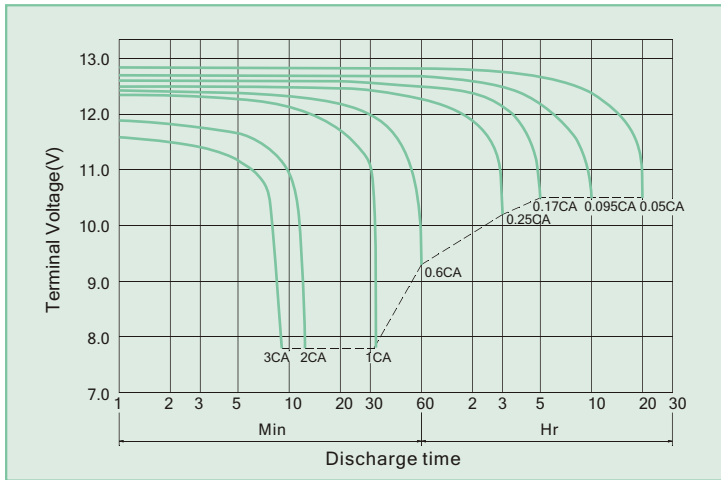


[M8 BOLT]

Terminal Hardware Initial Torque: B9,I3(10.0Nm±5%)

**BPS160-12 (BPS160-12FR) discharge characteristics (25°C /77°F)**

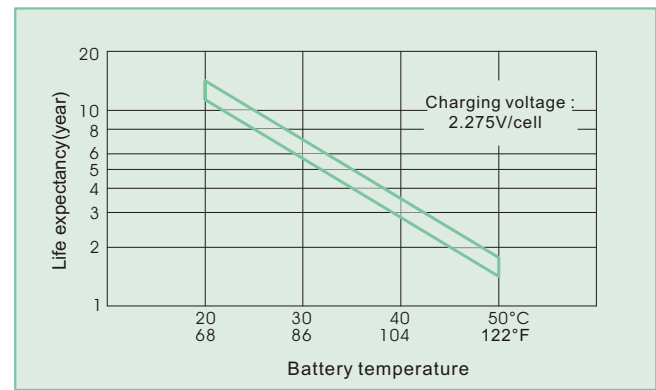
**Battery Charging Characteristics**



**Charging Procedure**

Application	Charging method	Charging Voltage at 25°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C /cell)	Max. charging current (CA)	Charging time 0.1CA, 25°C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.25~2.30	-3	0.3	24	20	0~40 (32~104°F)
For cycle service		2.40~2.50	-4	0.3	16	10	

**Effect Of Temperature On Long Term Float Life**



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

F.V. (V/cell) \ Discharge Time	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	2933	2030	1165	466.3	321.6	179.7	94.8
1.75V	3068	2107	1199	475.7	326.4	182.4	96.0
1.70V	3163	2155	1221	480.0	328.2	183.3	96.5
1.65V	3235	2185	1236	483.4	329.4	183.8	96.7
1.60V	3300	2208	1248	486.2	330.3	183.8	96.7

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

F.V. (V/cell) \ Discharge Time	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
1.80V	255.0	172.0	97.9	38.86	26.80	14.97	7.90
1.75V	266.8	178.6	100.8	39.64	27.20	15.20	8.00
1.70V	275.0	182.7	102.6	40.00	27.35	15.28	8.04
1.65V	281.3	185.2	103.8	40.28	27.45	15.32	8.06
1.60V	287.0	187.1	104.9	40.52	27.52	15.32	8.06

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

A/0 REV. Aug. 2009

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