

# **Pure Lead SLA Battery**

Capacity (25°C)	20HR (5.26A, 10.5V) = 105.2AH 10HR (10.1A, 10.5V) = 101AH 5HR (18.8A, 10.5V) = 94AH 1HR (71.8A, 10.5V) = 71.8AH					
Operating Temperature Range	Charge -20°C to 60°C (-4°F to 140°F) Discharge -40°C to 65°C (-40°F to 149°F) Storage = -20°C to 40°C (-4°F to 104°F)					
Approx. Weight	33.5 kg (73.9 lbs)					
Max. Discharge [A]	1200A					
Self Discharge	2% per month at (25°C)					
Capacity Affected by Temp. (20HR)	40°C (104°F) = 103% 25°C (77°F) = 100% 0°C (32°F) = 86% -15°C (5°F) = 65%					
Charge Voltage (25°C)	Cycle Use = 14.1-14.4V (-3mV/cell/°C) Max Current = 30A Float Use = 13.62V (-3mV/cell/°C)					
Dimensions (Nominal)	Length: 340.9 mm (13.42 in) Width: 170 mm (6.69 in) Height: 213 mm (8.39 in) Total Height: 216 mm (8.49 in)					

- Completely sealed, maintainance-free, low self-discharge
- High-rate performance, high energy density
- · State of the art Pure Lead Punched Grid PLPG technology
- Non-spillable, stable quality and high reliability with excellent re-charging performance
- Floating and standby use up to: 20 yrs (25°C)
- Container and Cover Material is ABS/PC Flame Retardant to UL94-V0
- · CE, UL certified
- Transportation- D.O.T., I.A.T.A. & F.A.A.



M6 Terminals





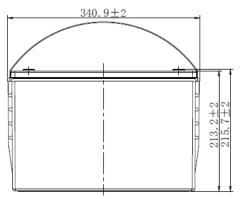


## APPLICATIONS

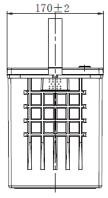
Multipurpose **Telecommunications UPS Medical Equipment** 

**Electric Vehicle Comm. Power Supply Elec. Power System (EPS) Emergency Backup Power** 

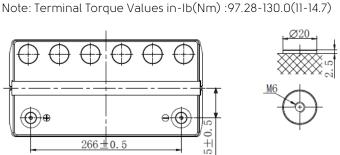
**DC Power Supply Auto Control System Traffic Control Signaling Emergency Lighting** 



zeusbatteryproducts.com

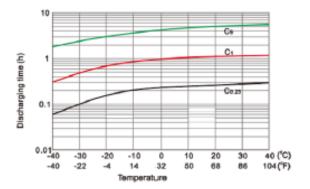


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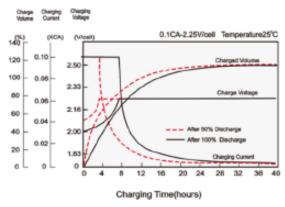


REV B

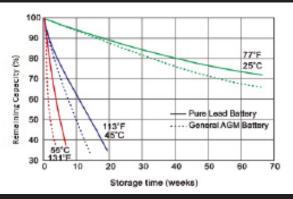
### Effects of Temperature on Discharge Time



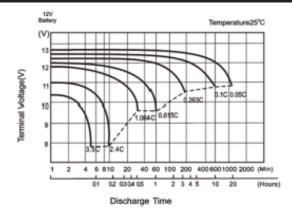
## Float Charging Characteristics



#### Self Discharge Characteristics



### Discharge Characteristics



#### Regular Charge / Float Charge / Storage

- Charging voltage temperature compensation needs to be applied when temperature is below 0°C and above +45°C.
- Charging in temperatures below 0°C, the charge current should not exceed 0.1C as the core battery temperature can increase rapidly and damage the battery.
- During floating charge or when in storage, the life of the battery is cut in half for every 8°C temperature rise over 25°C.

#### Discharge

- Discharging at elevated temperatures improves performance of the battery yet shortens its life due to accelerated aging.
- Low temperature affects the battery internal resistance and lowers its capacity.
- The battery will operate in temperature lower than -20°C when fully charged.
- The battery provides 100% specified capacity at 25°C. At -40°C the battery will deliver 35% of its stated capacity @10HR discharge rate and 10% of its stated capacity @1HR discharge rate.

Constant Current Discharge (A) at 25°C (77°F)													
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h	
1.85V/cell	288.7	214.5	169.8	111.6	67.1	37.8	27.1	21.7	17.6	11.9	9.8	5.10	
1.80V/cell	332.4	247.3	189.2	119.3	69.8	39.6	28.3	22.6	18.4	12.3	10.0	5.20	
1.75V/cell	363.4	270.7	205.0	126.9	71.8	40.7	29.0	23.2	18.8	12.5	10.1	5.26	
1.70V/cell	391.5	292.7	218.1	131.8	74.6	41.3	29.6	23.6	19.1	12.6	10.3	5.31	
1.67V/cell	437.0	308.3	230.1	137.1	76.2	42.1	29.9	23.9	19.3	12.8	10.3	5.35	
1.60V/cell	472.3	313.5	237.8	139.8	77.5	42.7	30.3	24.2	19.5	12.9	10.4	5.39	
			C	onstant F	ower Dis	charge (\	N) at 25°(	C (77°F)					
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h	
1.85V/cell	573.6	419.4	334.0	221.8	134.3	76.1	54.7	44.1	35.8	24.4	20.1	10.6	
1.80V/cell	649.0	478.8	368.6	235.1	138.9	79.1	56.7	45.6	37.3	25.1	20.5	10.7	
1.75V/cell	696.7	519.2	395.8	247.9	141.7	80.8	57.8	46.6	37.9	25.4	20.6	10.8	
1.70V/cell	756.7	550.0	418.0	254.7	146.0	81.4	58.6	47.0	38.2	25.5	20.8	10.8	
1.67V/cell	815.0	570.0	420.0	263.6	148.4	82.4	58.9	47.4	38.3	25.7	20.8	10.8	
1.60V/cell	857.9	575.0	443.0	266.0	149.6	82.9	59.1	47.5	38.3	25.7	20.9	10.9	