

# HEPL Series

## HEPL12-90 12V90Ah

Sacredsun thin plate pure lead (TPPL) series batteries are designed as high power, high energy, long life batteries used in UPS and Telecom, which are fully automatic produced by Con-Casting-Punch-Paste (CCPP) plate manufacture technology, reliable assembly technology and intelligent formation technology. Pure lead grid due to its enhanced corrosion resistance ensures the battery long float service life and the duration at elevated temperature. Thin plate and optimized positive and negative plate active material design provide large chemical reaction surface area, high power density and low resistance cycle.



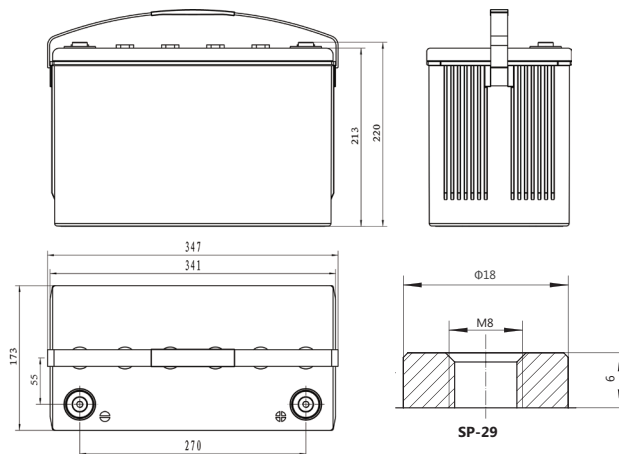
### Advantages

- High energy density and cycling performance
- Faster recharge
- Design life 15years at 25°C (77°F)
- Shelf life up to 2 years at 25°C (77°F)
- Wider operating temperature range: -40°C to +60°C (-40°F to +140°F)
- Container Material: PC-ABS flame retardant UL94-V0
- Easy and recommended upright installation

### Applications

- Telecommunications
- Power System
- Emergency Power
- Data Centers

### Drawing



### Standards

- IEC 60896-21/22: 2004
- JIS C8704-1/2: 2006
- EUROBAT guide

### Specifications

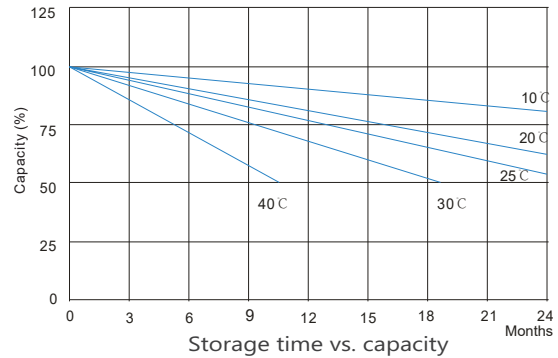
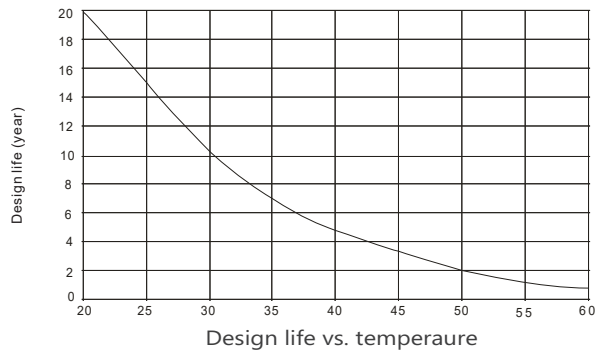
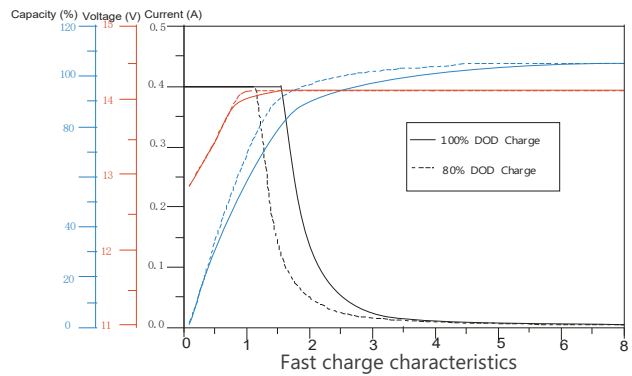
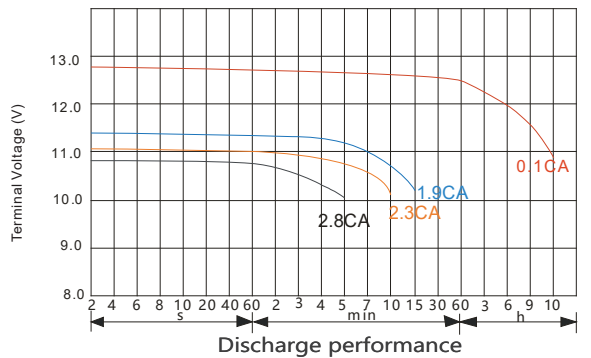
Battery Model	HEPL12-90			
Design Life (years, 25°C)	15			
Capacity (Ah, 25°C)	1HR (61.6A, 1.80V)	3HR (24.0A, 1.80V)	5HR (16.2A, 1.80V)	10HR (9A, 1.80V)
	61.6	72.0	81	90
Dimensions (mm)	Length	Width	Height	Total Height
	341	173	213	220
Approx. Weight (kg)	28.0			
Reference Internal Resistance (mΩ)	3.0 (fully charged @ 25°C)			
Maximum Discharge Current (A/5 Sec.)	1080			
Self-Discharge (25°C)	≤ 2 % per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.35 (-3mV/°C/cell), max charge current: 54A		2.23 (-3mV/°C/cell)	
Short Circuit Current (A)	4100			

## Discharge Data

Constant Current Discharge Data (25°C, A)											
End Voltage (V/cell)	min					h					
	10	15	20	30	45	1	2	3	5	8	10
1.60	252.3	193.5	158.6	115.6	85.4	65.0	36.4	25.8	17.5	11.6	9.5
1.65	244.3	188.6	155.4	113.9	84.5	64.5	35.9	25.3	17.3	11.4	9.5
1.67	240.4	186.3	153.8	112.9	84.1	64.2	35.7	25.1	17.1	11.2	9.4
1.70	234.2	182.4	151.0	111.5	83.2	63.8	35.2	25.0	16.9	11.0	9.3
1.75	222.2	174.9	145.8	108.5	81.6	62.8	34.4	24.5	16.6	10.9	9.2
1.80	208.7	166.3	139.7	105.0	79.7	61.6	33.5	24.0	16.2	10.7	9.0

Constant Power Discharge Data (25°C, W/cell)											
End Voltage (V/cell)	min					h					
	10	15	20	30	45	1	2	3	5	8	10
1.60	457.0	361.7	299.4	221.6	166.0	127.3	71.4	50.7	34.7	23.0	19.0
1.65	445.6	354.6	294.5	218.9	164.6	126.4	70.7	50.1	34.3	22.7	18.9
1.67	440.0	350.5	292.1	217.5	163.8	126.0	70.6	49.9	34.0	22.5	18.8
1.70	430.8	345.2	287.9	215.2	162.5	125.2	69.6	49.6	33.9	22.2	18.7
1.75	413.0	333.7	279.9	210.6	160.0	123.7	68.2	48.9	33.2	21.9	18.5
1.80	392.7	320.4	270.4	205.1	156.9	121.8	66.8	48.2	32.6	21.6	18.2

## Performance Curve



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