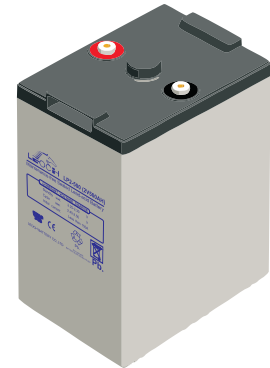


# LP SERIES-General Purpose

## LP2-500 (2V500AH)

### Specification

Nominal Voltage	2V	
Nominal Capacity(10HR)	500.0AH	
Dimensions	Length	240±3mm (9.45 inches)
	Width	175±2mm (6.89 inches)
	Container Height	327.5±3mm (12.9 inches)
	Total Height (with Terminal)	347.5±3mm (13.7 inches)
Approx Weight	Approx 29.0 kg (63.9lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	526.0 AH/26.3A	(20hr, 1.80V/cell, 25°C/77°F)
	500.0 AH/50.0A	(10hr, 1.80V/cell, 25°C/77°F)
	435.0 AH/87.0A	(5hr, 1.75V/cell, 25°C/77°F)
	378.0 AH/126.0A	(3hr, 1.75V/cell, 25°C/77°F)
	303.5 AH/303.5A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	4000A (5s)	
Internal Resistance	Approx 0.6mΩ	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	0~40°C (32~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 150.0A. Voltage 2.4V~2.5V at 25°C(77°F)Temp. Coefficient -5mV/°C	
	Standby Use No limit on Initial Charging Current Voltage 2.25V~2.3V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ Tele-communication central station (wired or cellular)
- ◆ Power system communication, military communication, etc.
- ◆ Network communication including: data transmission, television signal transmission, etc.
- ◆ Uninterruptable Power System (UPS- for Telecom)



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	383.4	304.0	249.5	149.9	115.8	95.1	81.0	70.8	57.0	47.8	25.3
1.80V/cell	411.4	319.8	265.0	158.1	121.5	99.4	84.4	73.9	59.2	50.0	26.3
1.75V/cell	435.6	336.3	276.5	164.7	126.0	102.8	87.0	75.7	60.3	50.5	26.5
1.70V/cell	457.1	349.0	286.2	169.5	129.3	105.0	88.5	77.0	61.3	51.0	26.8
1.65V/cell	479.5	364.2	296.5	174.6	132.2	107.3	90.4	78.3	62.1	51.7	27.1
1.60V/cell	496.0	374.0	303.5	178.8	135.0	108.8	91.7	79.4	62.9	52.3	27.4

### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	732.7	584.5	482.6	291.5	226.4	186.6	159.6	139.8	113.1	95.0	50.4
1.80V/cell	779.9	610.9	509.7	306.1	236.3	194.2	165.5	145.5	117.1	99.3	52.2
1.75V/cell	819.6	638.6	529.5	317.5	244.4	200.2	170.1	148.5	119.1	100.2	52.6
1.70V/cell	852.7	658.0	545.2	325.5	250.0	203.7	172.5	150.8	120.8	101.1	53.1
1.65V/cell	887.8	682.8	561.6	333.8	254.3	207.4	175.6	153.0	122.2	102.2	53.7
1.60V/cell	909.2	694.7	570.9	339.6	258.4	209.3	177.4	154.6	123.5	103.2	54.3

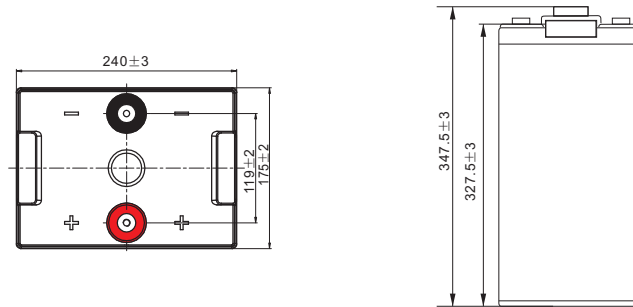
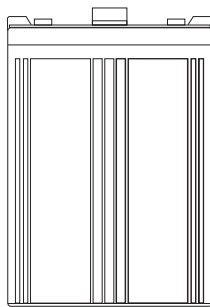
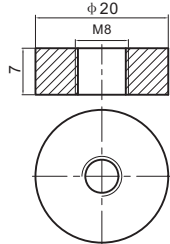
Specifications subject to change without notice.



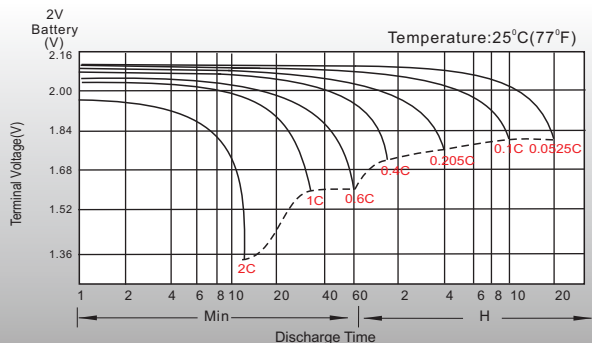
# Dimensions

## T11 Terminal

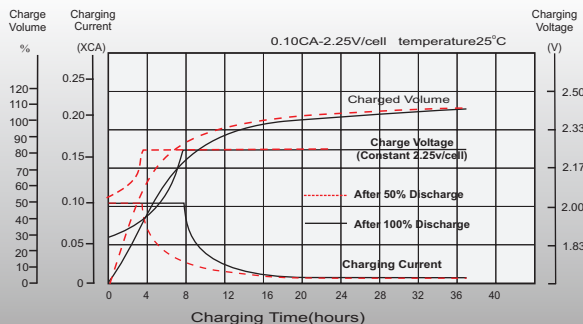
Unit: mm



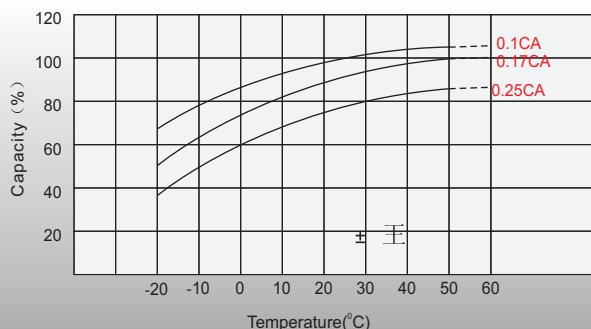
## Discharge Characteristics



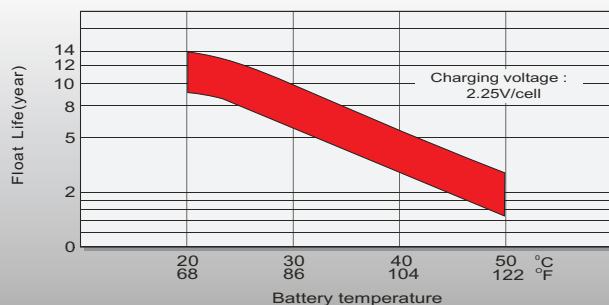
## Float Charging Characteristics



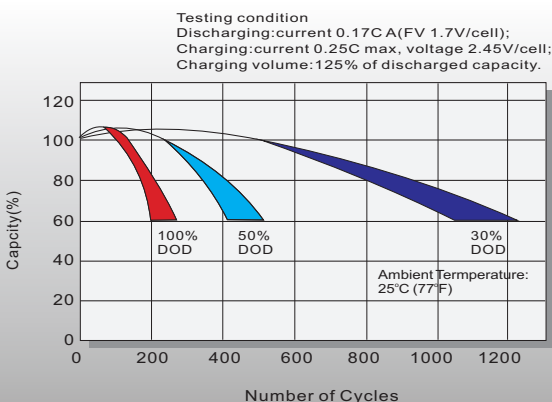
## Temperature Effects in Relation to Battery Capacity



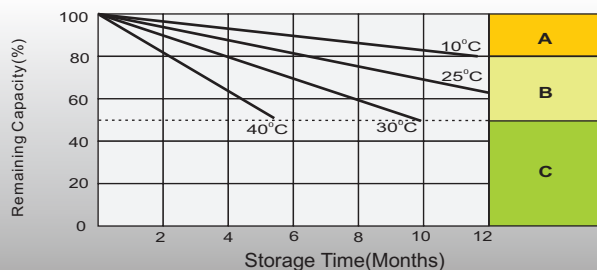
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8-10hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

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