

# LPL SERIES-Long Life Standby

## LPL2-500 (2V500AH)

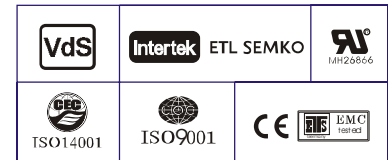
### Specification

Nominal Voltage	2V	
Nominal Capacity(10HR)	500.0AH	
Dimension	Length	240±3mm (9.45 inches)
	Width	175±2mm (6.89 inches)
	Container Height	330±3mm (12.99 inches)
	Total Height (with Terminal)	350±3mm (13.78 inches)
Approx Weight	Approx 30.5 Kg (67.2lbs)	
Terminal	T11	
Container Material	ABS	
Rated Capacity	534.0AH/26.7A	(20hr, 1.80V/cell, 25°C/77°F)
	500.0AH/50.0A	(10hr, 1.80V/cell, 25°C/77°F)
	443.5AH/88.7A	(5hr, 1.75V/cell, 25°C/77°F)
	386.1AH/128.7A	(3hr, 1.75V/cell, 25°C/77°F)
	300.3AH/300.3A	(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 LPL 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)
- ◆ EPS



### 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	375.2	300.8	250.8	155.5	118.7	97.0	82.6	72.2	57.8	48.2	25.8
1.80V/cell	402.6	316.5	262.3	162.5	124.5	101.4	86.1	75.4	60.3	50.0	26.7
1.75V/cell	426.3	332.8	273.6	169.0	128.7	104.8	88.7	77.2	61.4	50.7	26.8
1.70V/cell	447.3	345.3	283.2	175.8	132.7	107.1	90.3	78.5	62.5	51.3	27.1
1.65V/cell	469.2	360.3	293.4	181.5	135.7	109.4	92.2	79.9	63.4	51.9	27.4
1.60V/cell	/	370.0	300.3	185.0	138.0	110.9	93.5	81.0	64.4	52.6	27.6

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

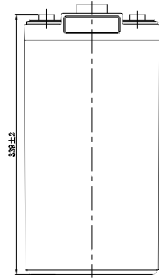
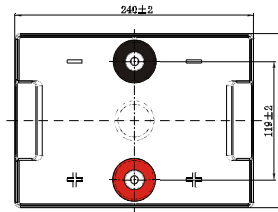
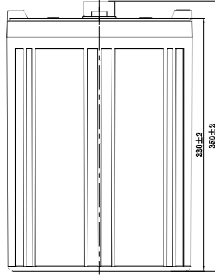
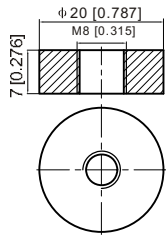
F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	717.0	578.3	485.1	302.5	231.9	190.3	162.8	142.6	114.6	95.8	51.3
1.80V/cell	763.1	604.5	504.5	314.6	242.2	198.1	168.8	148.4	119.2	99.3	53.0
1.75V/cell	802.0	631.8	524.0	325.8	249.6	204.2	173.5	151.4	121.3	100.5	53.2
1.70V/cell	834.4	651.1	539.5	337.4	256.4	207.8	175.9	153.9	123.3	101.6	53.8
1.65V/cell	868.8	675.6	555.8	347.0	261.0	211.5	179.1	156.0	124.8	102.6	54.3
1.60V/cell	/	687.3	564.9	351.5	264.2	213.5	180.9	157.7	126.4	103.9	54.6



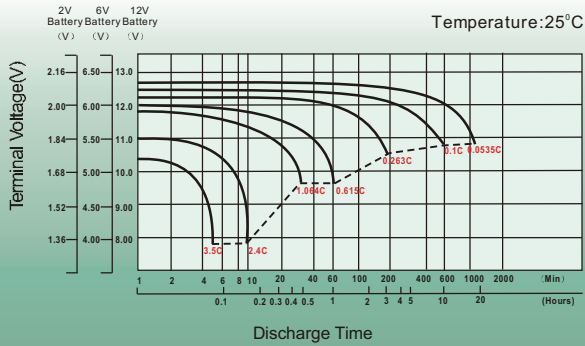
## Dimensions

### T11 Terminal

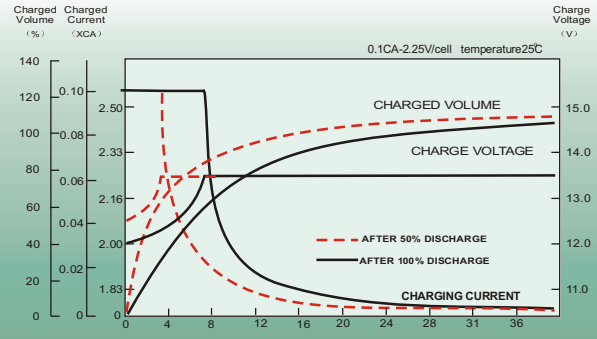
Unit: mm [inches]



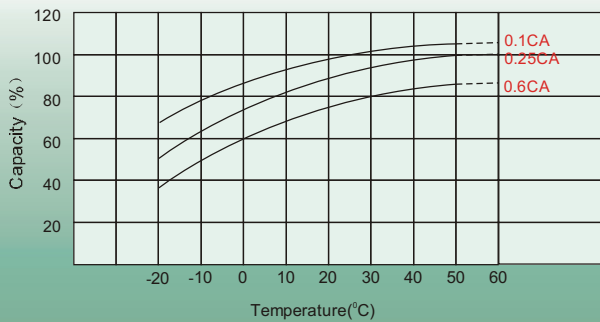
## Discharge Characteristics



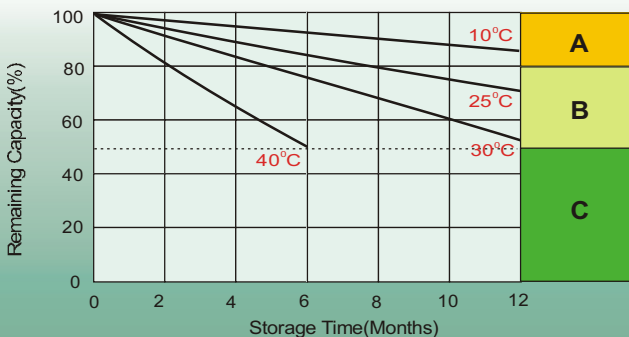
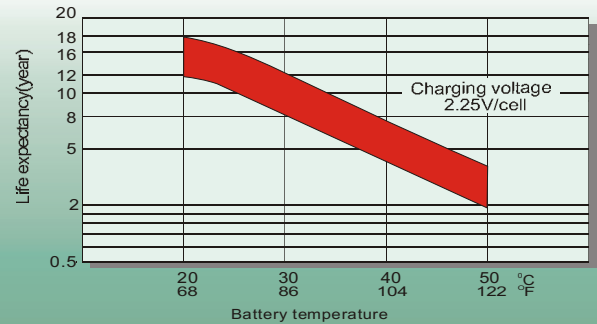
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



## 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 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8~10 hours 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.

## Sales Office

### China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com  
Http://www.leoch.com

### North America sales office:

Add: 19751 Descartes, Unit A,  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us  
Http://www.leoch.us

### Europe sales office:

Add: 9B Wheatstone Park, Waterwells  
Business Park, Gloucester, GL2 2AQ, UK.  
Tel: +44(0) 1452 729428  
Fax: +44 (0)1452-690125  
E-mail: Sales.Europe@leoch.com

### Singapore sales office:

Add: No. 53, Ubi Avenue 1, #03-21 Paya  
Ubi Industrial Park, Singapore 408934  
Tel: +65 6841 6629  
E-mail: sales.sg@leoch.com

### HongKong sales office:

Add: Unit 3910, 39/F, Cable TV Tower, No.9  
Hoi Shing Road, Tsuen Wan, NT.H.K  
Tel: +852 3578 6666  
E-mail: sales.hk@leoch.com