



# LPL Series-Long Life Standby LPL2-500(2V500Ah)

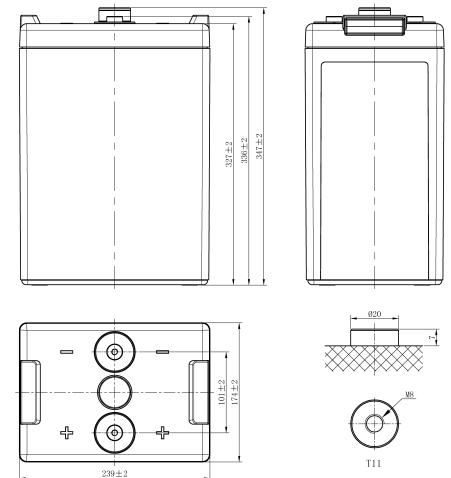


## Specifications

Rated Voltage	2V	
Nominal Capacity	500.0Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	239±3mm (9.41 inches)
	Width	174±2mm (6.85 inches)
	Container Height	327.0±3mm (12.87 inches)
	Total Height	347.0±3mm (13.66 inches)
Approx Weight	31.0 Kg (68.34 lbs)	
Terminal	T11 (M8)	
Container Material	PP (Polypropylene) HB/V0	
Rated Capacity (25°C)	534.0 Ah	(20hr, 26.7A, 1.80V/cell)
	500.0 Ah	(10hr, 50.0A, 1.80V/cell)
	443.5 Ah	(5hr, 88.7A, 1.75V/cell)
	386.1 Ah	(3hr, 128.7A, 1.75V/cell)
	300.3 Ah	(1hr, 300.3A, 1.60V/cell)
Max. Discharge Current	4000A (5s)	
Internal Resistance (25°C)	Approx 0.75mΩ	
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	Initial Charging Current less than 150.0A. Voltage 2.25V~2.30V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	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.	



## Layout



## 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/cell) 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



# LPL Series-Long Life Standby LPL2-500(2V500Ah)



## 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

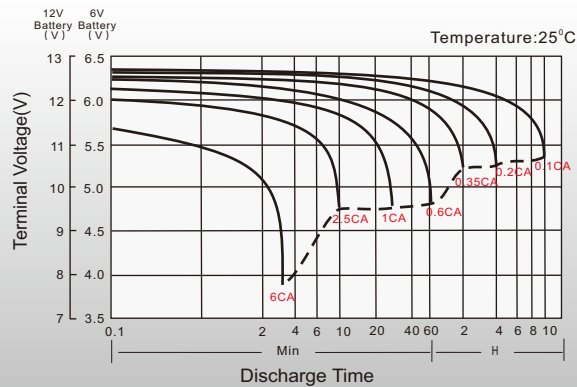
## General Features

- 20 years design life
- Grid refining technology and the thicker plates are used to extend the battery standby life and reduce the plate grid corrosion speed
- Using oxygen recombination technology: maintenance-free
- Unique vent valve design: control water losing, prevent air and spark going inside
- Can be operated in upright, side, or end mounting orientation

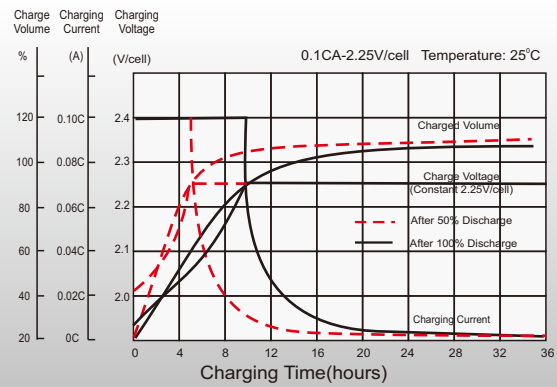
## Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

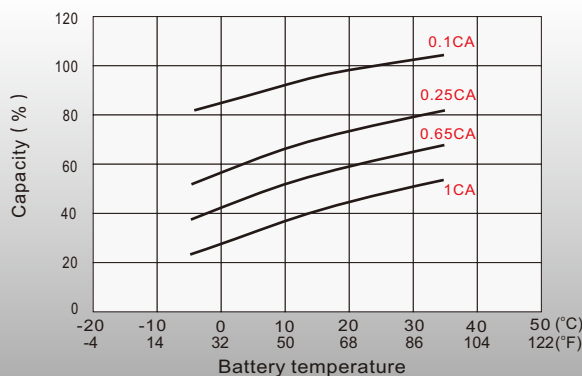
## Discharge Characteristics



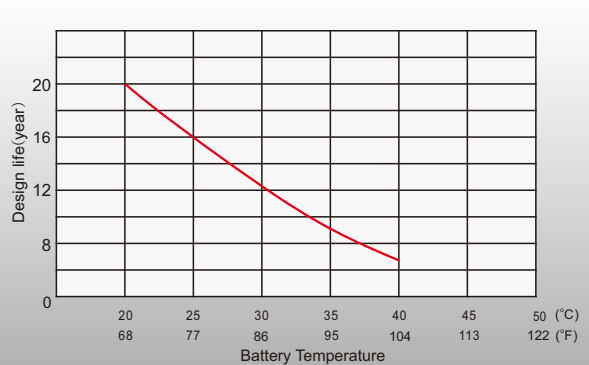
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Design Life



## Sales Offices Worldwide

### China Sales Office

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

### HongKong Sales Office

Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road,  
Tsuen Wan, New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +44 1452 690125  
E-mail: sales.hk@leoch.com

### Singapore Sales Office

No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 6863 6079  
Email: sales.sg@Leoch.com

### Australia Sales Office

2 /29 Tarlington Place, Smithfield. NSW 2164  
Australia  
Tel: 02 9756 0950  
E-mail: sales.au@leoch.com

### North America Sales Office

19751 Descartes  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us

### UK Sales Office

9B Wheatstone Court. Waterwells, Business Park,  
Gloucester, GL2-2AQ, UK United Kingdom  
Tel: +44(0) 1452 729428 / 1452 729696  
Fax: +44 1452 690125  
E-mail: Sales.Europe@leoch.com

### EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,  
Greece  
Tel: +30 210 5760318 (2 lines)  
E-mail: support\_EMEA@leoch.com

### India Sales Office

Shed no.A-53(b), 2nd Stage of Peenya Industrial Area,  
Bangalore North Taluk, Bangalore-560058, India  
Tel: +91-80-23440018/23440019  
Fax: +91-80-23440017  
E-mail: indiasales@leoch.com



[Http://www.leoch.com](http://www.leoch.com)

[Http://www.leoch.us](http://www.leoch.us)

© 2019 LEOCH. All rights reserved.

Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.

Subject to revisions without prior notice.

Publication No.: LP-LPL2-500-SGTHSE-DJ500PP-V1.1-20220317