

LPL SERIES-Long Life Standby

LPL12-12 (12V12AH)

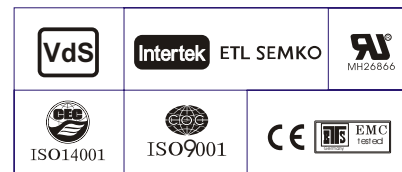
Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	12.0AH	
Dimension	Length	151±2mm (5.95 inches)
	Width	98±1mm (3.86 inches)
	Container Height	95±1mm (3.74 inches)
	Total Height (with Terminal)	101±2mm (3.98 inches)
Approx Weight	Approx 3.80 Kg (8.38 lbs)	
Terminal	T1 / T2/T3-A	
Container Material	ABS	
Rated Capacity	12.7AH/0.636A	(20hr , 1.80V/cell,25°C/77°F)
	12.0 AH/1.20A	(10hr, 1.80V/cell,25°C/77°F)
	10.4 AH/2.08A	(5hr, 1.75V/cell,25°C/77°F)
	9.48 AH/3.16A	(3hr, 1.75V/cell,25°C/77°F)
	7.38 AH/7.38A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	180A (5s)	
Internal Resistance	Approx 18.0mΩ	
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 than3.6A.Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°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

- ◆ UPS and EPS
- ◆ Emergency light
- ◆ Railway signal and aircraft signal system
- ◆ Marine and power stations
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply, DC power supply



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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	15.5	12.9	11.0	8.99	6.80	5.70	3.64	2.884	2.34	1.89	1.66	1.33	1.13	0.630
1.80V/cell	19.8	15.6	13.0	10.6	7.91	6.39	3.97	3.103	2.49	2.03	1.78	1.41	1.20	0.636
1.75V/cell	21.7	17.0	14.0	11.0	8.21	6.68	4.12	3.160	2.56	2.08	1.83	1.43	1.21	0.642
1.70V/cell	23.7	18.2	14.7	11.5	8.54	6.90	4.28	3.248	2.62	2.13	1.86	1.45	1.22	0.654
1.65V/cell	25.6	19.4	15.6	12.1	8.75	7.13	4.40	3.386	2.71	2.19	1.91	1.47	1.25	0.662
1.60V/cell	27.8	20.7	16.7	12.8	9.12	7.38	4.55	3.490	2.79	2.27	1.95	1.49	1.26	0.666

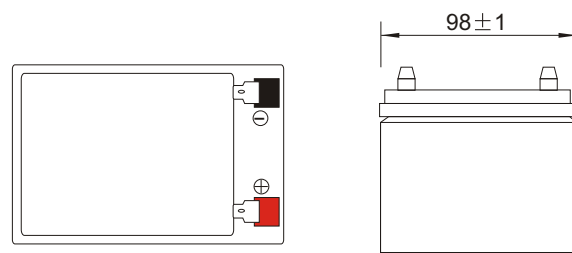
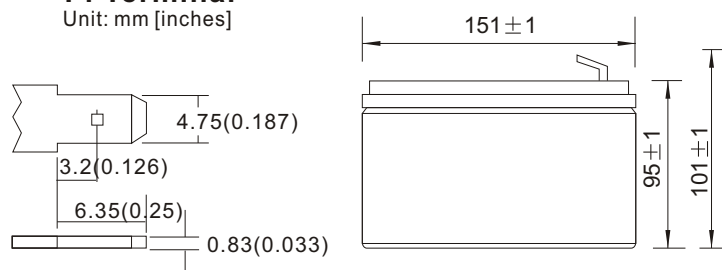
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.1	24.6	21.1	17.5	13.3	11.2	7.20	5.72	4.65	3.77	3.32	2.66	2.28	1.270
1.80V/cell	36.8	29.3	24.6	20.3	15.4	12.5	7.80	6.12	4.94	4.03	3.54	2.82	2.41	1.280
1.75V/cell	39.8	31.6	26.2	20.9	15.8	13.0	8.06	6.21	5.04	4.12	3.63	2.86	2.43	1.291
1.70V/cell	42.4	33.3	27.4	21.6	16.4	13.4	8.36	6.37	5.16	4.22	3.70	2.90	2.46	1.314
1.65V/cell	45.4	35.1	28.9	22.6	16.6	13.7	8.55	6.62	5.31	4.32	3.77	2.94	2.50	1.329
1.60V/cell	48.1	36.9	30.4	23.7	17.2	14.1	8.79	6.79	5.46	4.45	3.84	2.96	2.53	1.335

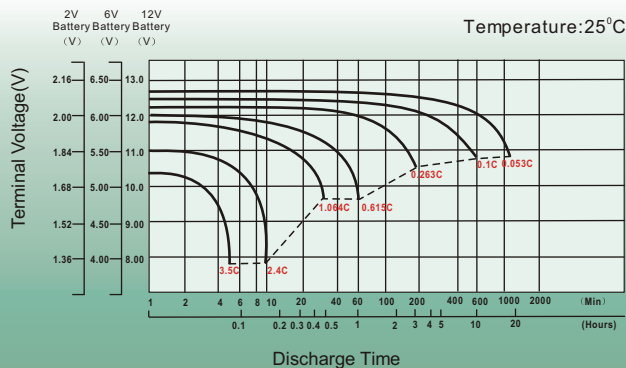
Dimensions

■ T1 Terminal

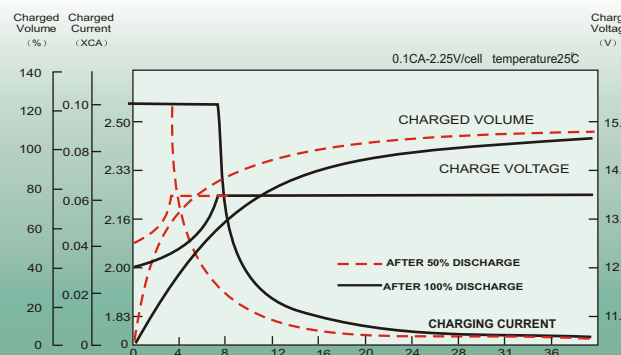
Unit: mm [inches]



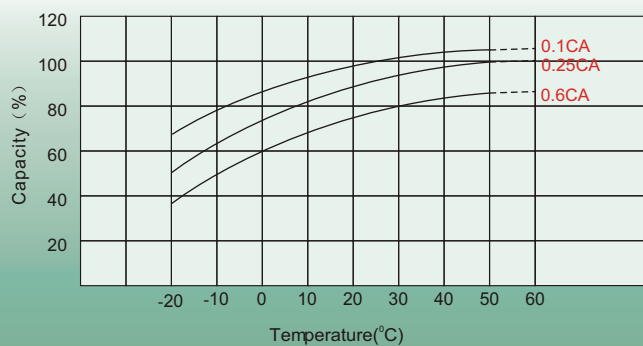
Discharge Characteristics



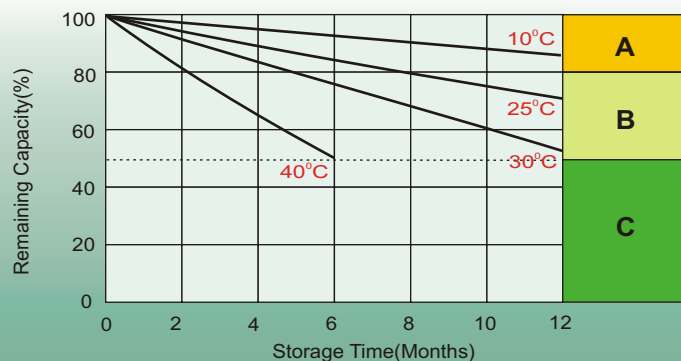
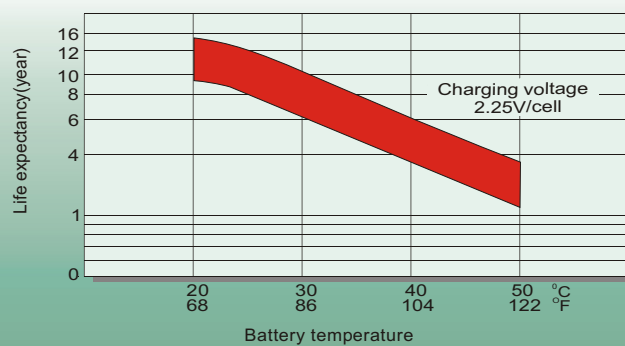
Float Charging Characteristics



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.)

Supplementary charge required before use. Optional charging way as below:

B

 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.,Nan
Nanshan,Shenzhen, China. 518052

Tel:+8 6-755-86036060 (100 lines)

Fax: +86-755-26067269

E-mail: export@leoch.com

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

Europe sales office:

**Add: 9B Wheatstone Park, Waterwells
Business Park, Gloucester, GL2 2AQ. UK.**

Tel: +44(0) 01452 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