

# LP SERIES-General Purpose

## LP12-30H (12V30AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	30.0AH	
Dimension	Length	195±2mm (7.68 inches)
	Width	130±2mm (5.12 inches)
	Container Height	164±2mm (6.46 inches)
	Total Height (with Terminal)	178±2mm (7.01 inches)
	Approx Weight	Approx 9.7 kg (21.4lbs)
Terminal	T5	
Container Material	ABS	
Rated Capacity	30.0 AH/1.50A	(20hr , 1.80V/cell,25°C/77°F)
	27.9 AH/2.79A	(10hr, 1.80V/cell,25°C/77°F)
	25.5 AH/5.10A	(5hr, 1.75V/cell,25°C/77°F)
	22.9 AH/7.65A	(3hr, 1.75V/cell,25°C/77°F)
	18.8AH/18.8A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	450A (5s)	
Internal Resistance	Approx 13mΩ	
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 than9.0A.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 LP series battery 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

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	57.1	43.9	36.3	31.4	24.3	17.90	15.1	8.92	6.98	5.68	4.63	4.02	3.24	2.71	1.49
1.80V/cell	76.7	56.1	43.9	37.1	28.7	20.8	16.9	9.74	7.51	6.06	4.97	4.31	3.44	2.79	1.50
1.75V/cell	86.5	61.6	48.0	40.0	29.8	21.6	17.7	10.1	7.65	6.20	5.10	4.43	3.50	2.87	1.52
1.70V/cell	95.2	67.1	51.2	42.0	31.0	22.5	18.2	10.4	7.86	6.36	5.23	4.52	3.54	2.92	1.54
1.65V/cell	105.0	72.5	54.4	44.6	32.7	23.0	18.7	10.5	8.20	6.58	5.37	4.62	3.60	2.98	1.56
1.60V/cell	115.8	78.7	58.2	47.5	34.5	24.0	18.8	11.0	8.45	6.79	5.55	4.72	3.63	3.02	1.57

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	104.5	81.0	67.8	59.2	46.3	34.4	29.1	17.3	13.6	11.1	9.08	7.90	6.39	5.36	2.94
1.80V/cell	138.7	102.3	80.8	69.0	53.8	39.7	32.4	18.8	14.6	11.8	9.69	8.44	6.76	5.51	2.97
1.75V/cell	153.1	110.6	87.2	73.5	55.4	40.8	33.8	19.4	14.8	12.0	9.92	8.64	6.86	5.65	2.99
1.70V/cell	163.9	117.9	91.8	76.7	57.3	42.3	34.7	19.8	15.2	12.3	10.2	8.81	6.95	5.76	3.04
1.65V/cell	178.2	126.0	96.9	80.8	60.0	42.9	35.3	20.0	15.7	12.7	10.4	8.97	7.05	5.87	3.08
1.60V/cell	192.0	133.7	101.9	85.2	62.9	44.5	35.4	20.8	16.1	13.0	10.7	9.13	7.10	5.93	3.10

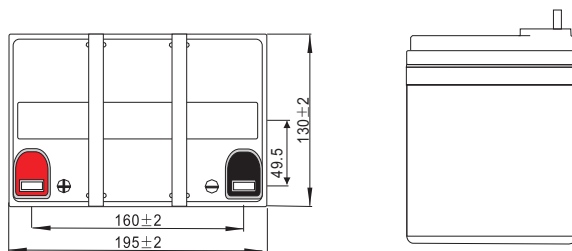
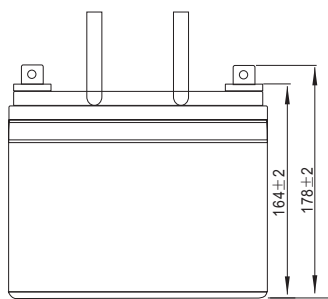
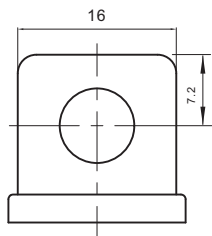
Specifications subject to change without notice.



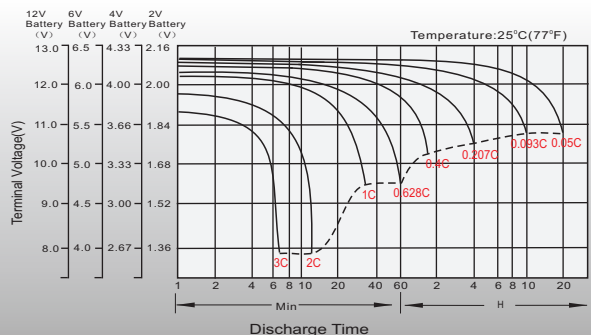
## Dimensions

### T5 Terminal

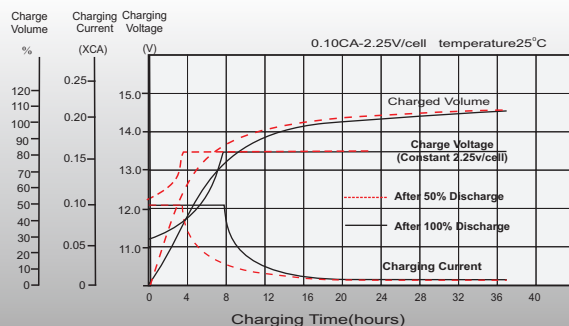
Unit: mm



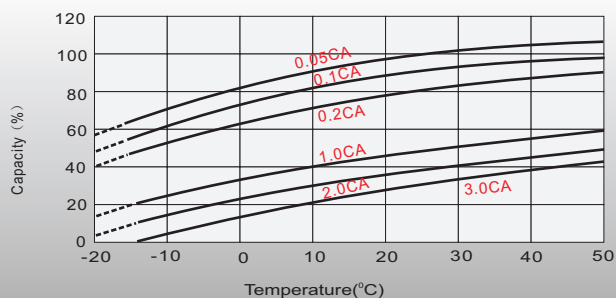
## Discharge Characteristics



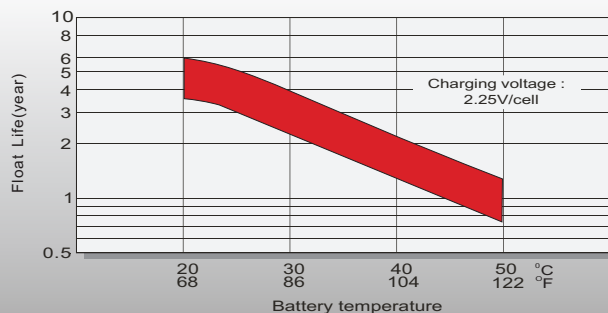
## Float Charging Characteristics



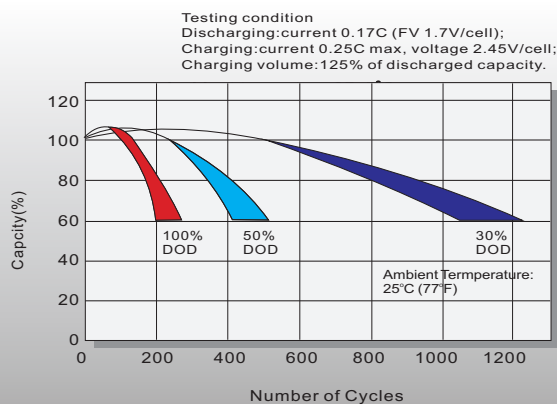
## Temperature Effects in Relation to Battery Capacity



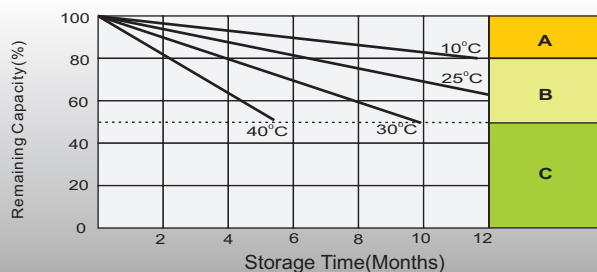
## Effect of Temperature on Long Term Float Life



## 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.)

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

### HongKong sales office:

Workshop C, 33/F, TML Tower,  
No. 3 Hoi Shing Road, Tsuen Wan,  
New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +852 21170016  
E-mail: sales.hk@leoch.com

### Singapore sales office:

Add: No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 68636079  
Email sales.sg@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.com

### Europe sales office:

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