

# LPS SERIES-Solar Power

## LPS2-450 (2V460AH)



### Specification

Nominal Voltage	2V	
Nominal Capacity(100HR)	460.0AH	
Dimension	Length	210±2mm (8.27 inches)
	Width	175±2mm (6.89 inches)
	Container Height	330±2mm (12.99 inches)
	Total Height (with Terminal)	350±2mm (13.78 inches)
	Approx Weight	Approx 25.5 Kg (56.2 lbs)
Terminal	T11	
Container Material	ABS	
Rated Capacity	460.0 AH/4.60A	(100hr , 1.80V/cell, 25°C/77°F)
	428.0 AH/21.4A	(20hr , 1.80V/cell, 25°C/77°F)
	400.0 AH/40.0A	(10hr, 1.80V/cell, 25°C/77°F)
	351.5 AH/70.3A	(5hr, 1.75V/cell, 25°C/77°F)
	235.2 AH/235.2A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	3200A (5s)	
Internal Resistance	Approx 0.7mΩ	
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 120.0A. 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 LPS 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

- ◆ Green energy systems
- ◆ Communication systems

Leoch battery is green battery, focus on the Environmental protection and Ecological protection, which well connect human being and environment into harmony. Continuous power supply for people, and being benign cycle back to the green environment.



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

F.V/Time	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	48h	100h
1.85V/cell	293.6	233.0	193.4	120.6	93.3	76.9	65.4	46.6	38.7	20.7	9.16	4.50
1.80V/cell	315.0	245.1	205.4	127.4	97.7	80.3	68.2	48.1	40.0	21.4	9.30	4.60
1.75V/cell	333.6	257.7	214.3	132.2	101.1	83.0	70.3	49.0	40.6	21.5	9.46	4.64
1.70V/cell	350.0	267.4	221.9	136.2	103.7	84.8	71.5	49.7	41.0	21.8	9.57	4.70
1.65V/cell	367.1	279.1	229.8	139.4	106.3	86.7	73.0	50.4	41.6	22.1	9.69	4.76
1.60V/cell	379.6	286.5	235.2	142.4	108.1	87.9	74.1	51.1	42.2	22.3	9.80	4.81

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

F.V/Time	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	48h	100h
1.85V/cell	561.0	447.9	374.0	234.6	182.4	150.7	128.9	92.5	77.0	41.1	18.3	9.00
1.80V/cell	597.1	468.1	395.1	246.6	190.1	157.0	133.8	95.1	79.4	42.5	18.5	9.18
1.75V/cell	627.5	489.3	410.5	254.9	196.1	161.7	137.4	96.7	80.5	42.7	18.8	9.25
1.70V/cell	652.9	504.2	422.6	261.5	200.5	164.6	139.4	98.1	81.3	43.2	19.0	9.36
1.65V/cell	679.8	523.3	435.3	266.5	204.5	167.6	141.8	99.2	82.4	43.7	19.2	9.45
1.60V/cell	695.9	532.1	442.4	270.6	207.0	169.1	143.3	100.3	83.4	44.1	19.4	9.54

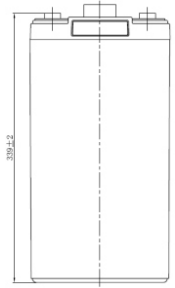
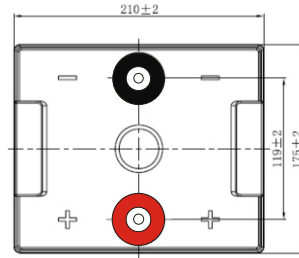
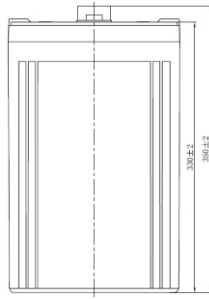
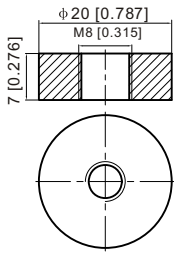
Specifications subject to change without notice.



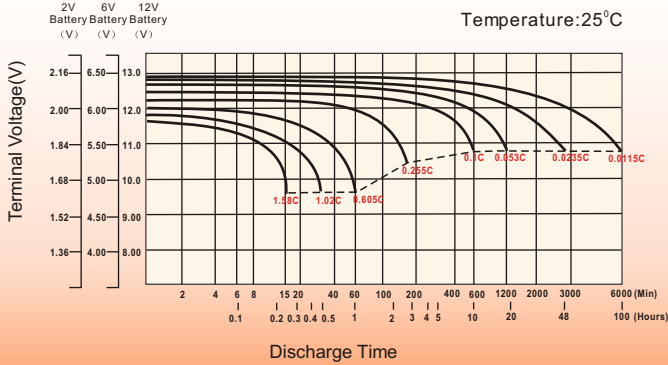
## Dimensions

### T11 Terminal

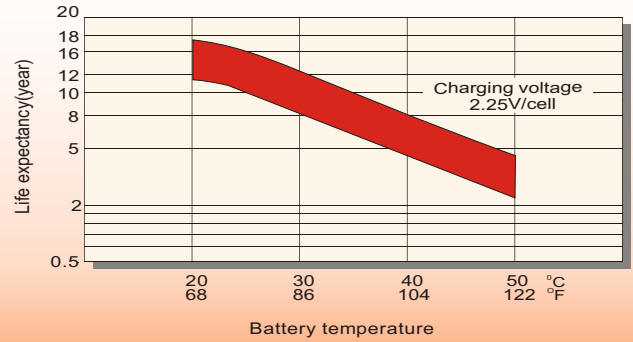
Unit: mm [inches]



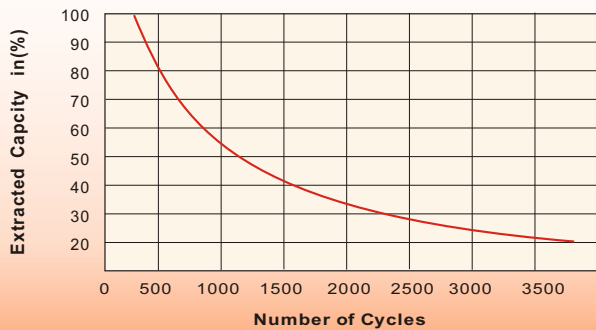
## Discharge Characteristics



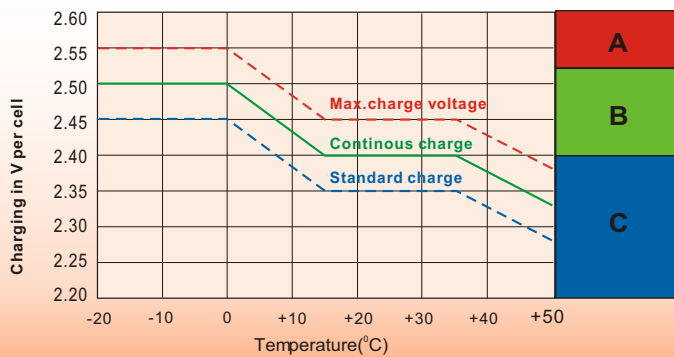
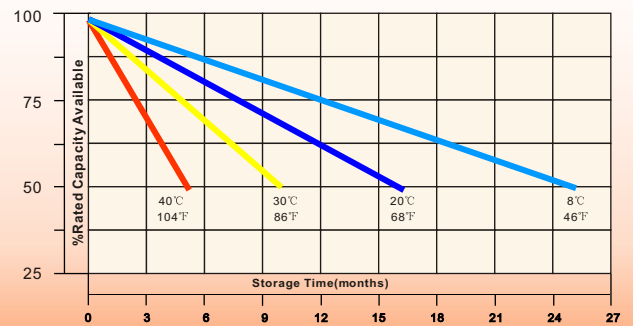
## Effect of Temperature on Long Term Float Life



## Cycle Service Life



## Self-Discharge at Different Temperatures



## Charge Mode

- A** With switch regulator (two-step controller) charge on curve max.charge voltage for max.2 hrs/day then switch over to continuous charge
- B** Standard charge without switching
- C** Boost charge (Equalizing charge with external generator) charge on curve continuous charge for max. 5 hrs/month, then switch over to curve Standard charge

## Sales Office

### China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanshan 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:

Add: 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 68416629  
Fax: +65 68443210  
Email: sales.sg@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