

LPS SERIES-Solar Power

LPS12-36 (12V36.8AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	36.8AH	
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 11.2 Kg (24.7 lbs)	
Terminal	T5	
Container Material	ABS	
Rated Capacity	36.8 AH/0.368A	(100hr, 1.80V/cell, 25°C/77°F)
	33.6 AH/1.68A	(20hr, 1.80V/cell, 25°C/77°F)
	32.0 AH/3.20A	(10hr, 1.80V/cell, 25°C/77°F)
	28.5 AH/5.70A	(5hr, 1.75V/cell, 25°C/77°F)
	19.5 AH/19.5A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	480A (5s)	
Internal Resistance	Approx 13.0mΩ	
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 than 9.6A. 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 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 (solar, wind, hydro, etc)
- ◆ Solar power stations
- ◆ Telecommunications installations
- ◆ Measurement stations
- ◆ Pump systems
- ◆ Signal station
- ◆ Survey and Mapping system
- ◆ Emergency lighting
- ◆ Railway crossing
- ◆ Traffic lights
- ◆ Street lightening
- ◆ Lawn lamp
- ◆ Street signs
- ◆ SOS pillars
- ◆ Alarm installations
- ◆ Weekend cottage camping
- ◆ Caravans
- ◆ Boats or buoys



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

F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	48h	100h
1.85V/cell	36.6	30.4	23.6	18.7	15.1	9.93	7.45	6.10	5.16	3.60	3.07	1.63	0.73	0.360
1.80V/cell	40.6	33.5	25.5	19.9	16.0	10.6	7.85	6.39	5.41	3.78	3.20	1.68	0.74	0.368
1.75V/cell	45.0	36.7	27.4	21.2	17.2	11.1	8.32	6.68	5.70	3.89	3.27	1.72	0.76	0.371
1.70V/cell	49.2	40.0	30.1	22.2	18.2	11.7	8.69	6.96	5.92	4.04	3.37	1.75	0.77	0.376
1.65V/cell	52.1	42.2	31.7	23.6	18.8	12.1	9.01	7.20	6.05	4.14	3.45	1.79	0.78	0.382
1.60V/cell	57.1	45.9	33.7	24.4	19.5	12.6	9.31	7.43	6.26	4.26	3.52	1.83	0.79	0.385

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

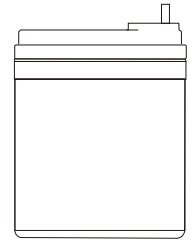
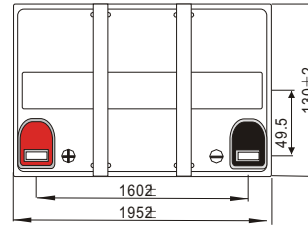
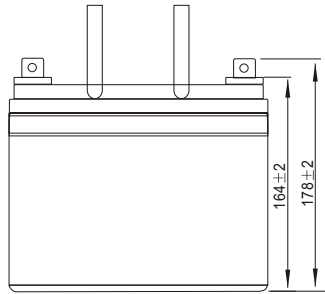
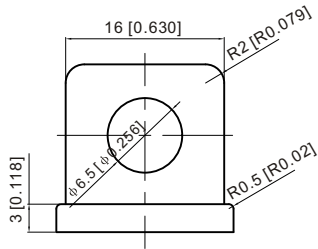
F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	48h	100h
1.85V/cell	69.0	57.9	45.5	36.3	29.6	19.47	14.7	12.0	10.2	7.18	6.13	3.26	1.47	0.724
1.80V/cell	75.5	62.8	48.3	38.1	30.9	20.6	15.4	12.6	10.7	7.51	6.39	3.36	1.49	0.739
1.75V/cell	82.7	68.1	51.6	40.5	33.2	21.5	16.2	13.1	11.2	7.72	6.52	3.42	1.51	0.744
1.70V/cell	89.2	73.9	56.4	42.2	35.0	22.6	16.9	13.6	11.6	8.00	6.72	3.49	1.53	0.752
1.65V/cell	94.0	77.7	59.1	44.6	36.1	23.3	17.5	14.0	11.8	8.20	6.86	3.57	1.56	0.763
1.60V/cell	101.0	83.1	62.1	45.8	37.1	24.1	18.0	14.4	12.2	8.40	7.00	3.64	1.58	0.769



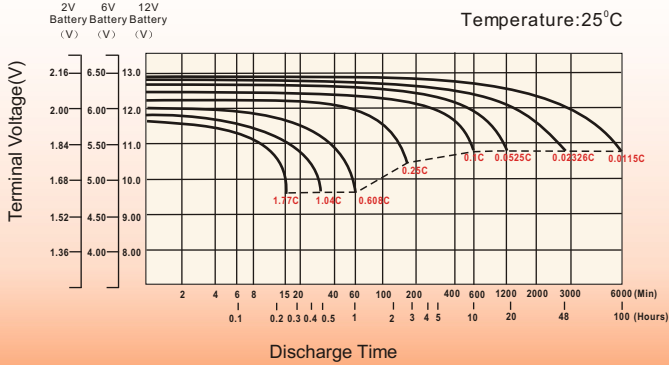
Dimensions

T5 Terminal

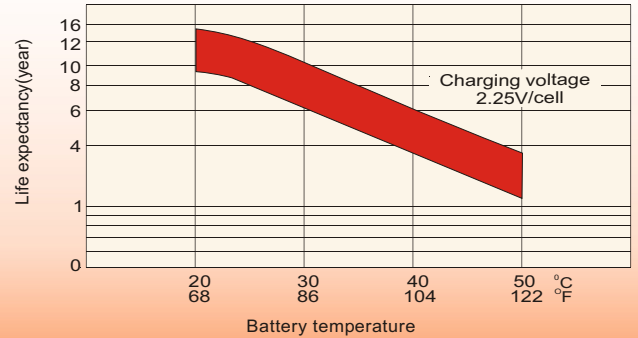
Unit: mm [inches]



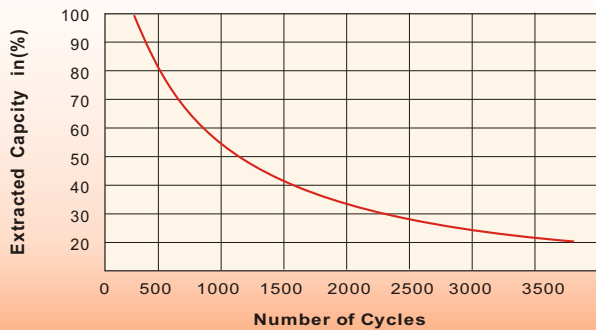
Discharge Characteristics



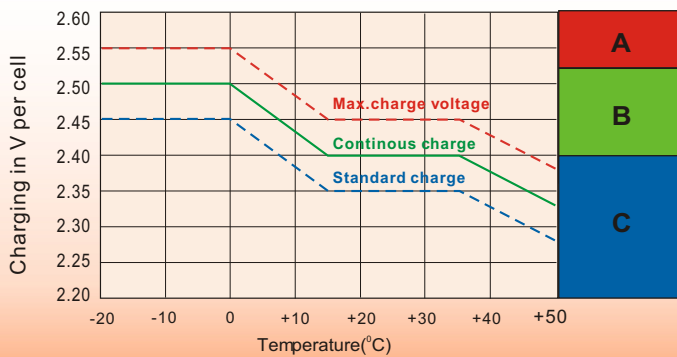
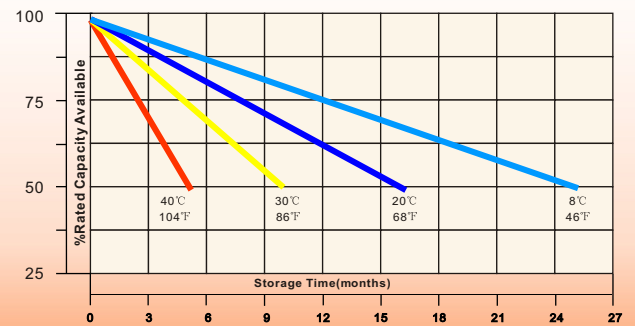
Effect of Temperature on Long Term Float Life



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.,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:

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