

LPS SERIES-Solar Power

LPS12-7.5 (12V7.5AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	7.5AH	
Dimension	Length	151±1mm (5.95 inches)
	Width	65±1mm (2.56 inches)
	Container Height	94.5±1mm (3.72 inches)
	Total Height (with Terminal)	100±1mm (3.94 inches)
Approx Weight	Approx 2.45 Kg (5.4 lbs)	
Terminal	T1 / T2	
Container Material	ABS	
Rated Capacity	7.50 AH/0.075A	(100hr ,1.80V/cell,25°C/77°F)
	6.83 AH/0.341A	(20hr ,1.80V/cell,25°C/77°F)
	6.50 AH/0.65A	(10hr,1.80V/cell,25°C/77°F)
	5.80 AH/1.16A	(5hr,1.75V/cell,25°C/77°F)
	3.97 AH/3.97A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	78A (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 than1.95A.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	7.44	6.18	4.80	3.80	3.08	2.02	1.51	1.24	1.05	0.73	0.62	0.331	0.149	0.073
1.80V/cell	8.25	6.80	5.18	4.04	3.24	2.14	1.60	1.30	1.10	0.77	0.65	0.341	0.151	0.075
1.75V/cell	9.15	7.45	5.57	4.32	3.50	2.25	1.69	1.36	1.16	0.79	0.66	0.348	0.154	0.075
1.70V/cell	9.99	8.13	6.12	4.51	3.69	2.37	1.77	1.41	1.20	0.82	0.68	0.355	0.156	0.076
1.65V/cell	10.6	8.58	6.45	4.79	3.82	2.45	1.83	1.46	1.23	0.84	0.70	0.364	0.158	0.078
1.60V/cell	11.6	9.32	6.85	4.96	3.97	2.55	1.89	1.51	1.27	0.86	0.72	0.372	0.161	0.078

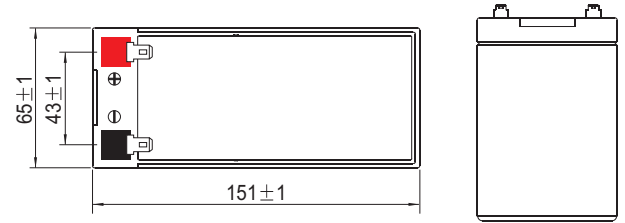
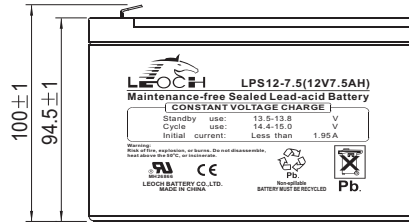
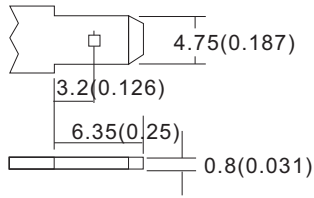
Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	48h	100h
1.85V/cell	14.0	11.8	9.24	7.38	6.01	3.96	2.98	2.45	2.07	1.46	1.24	0.662	0.299	0.147
1.80V/cell	15.3	12.8	9.82	7.74	6.29	4.18	3.12	2.55	2.17	1.53	1.30	0.682	0.303	0.150
1.75V/cell	16.8	13.8	10.5	8.24	6.75	4.36	3.29	2.65	2.27	1.57	1.32	0.695	0.307	0.151
1.70V/cell	18.1	15.0	11.4	8.57	7.11	4.59	3.44	2.76	2.36	1.62	1.36	0.708	0.311	0.153
1.65V/cell	19.1	15.8	12.0	9.06	7.32	4.73	3.56	2.85	2.41	1.67	1.39	0.725	0.316	0.155
1.60V/cell	20.5	16.9	12.6	9.30	7.53	4.89	3.65	2.93	2.48	1.71	1.42	0.740	0.321	0.156

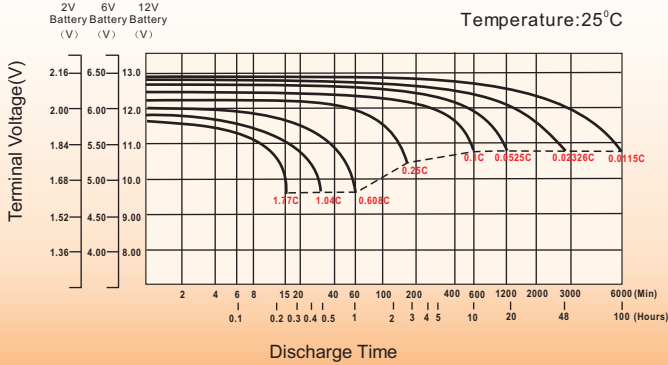
Dimensions

T1 Terminal

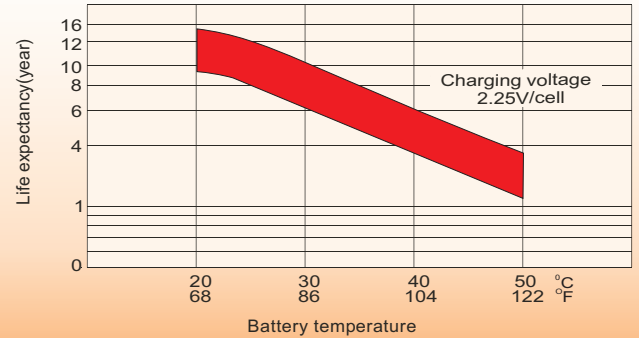
Unit: mm [inches]



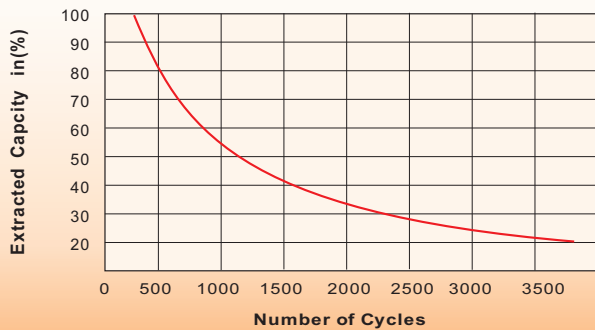
Discharge Characteristics



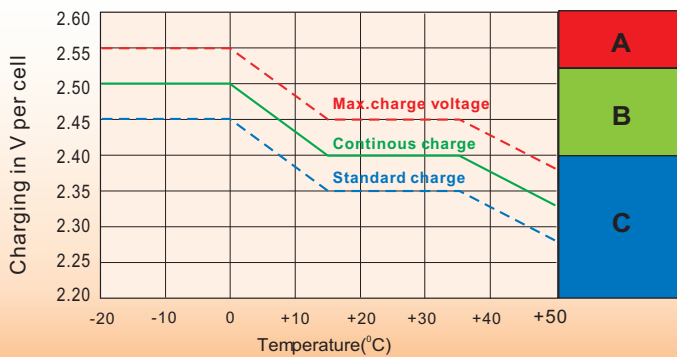
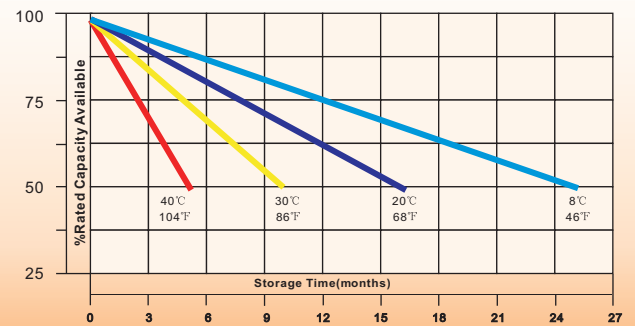
Effect of Temperature on Long Term Float Life



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

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