

# LPS SERIES-Solar Power

## LPS12-7.5 (12V7.5AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	7.5AH	
Dimension	Length	151±1mm (5.94 inches)
	Width	65±1mm (2.56 inches)
	Container Height	93.5±1mm (3.68 inches)
	Total Height (with Terminal)	99.0±1mm (3.90inches)
Approx Weight	Approx 2.45 Kg (5.4 lbs)	
Terminal	T2	
Container Material	ABS	
Rated Capacity	7.50 AH/0.075A	(100hr ,1.80V/cell,25°C/77°F)
	6.84 AH/0.342A	(20hr ,1.80V/cell,25°C/77°F)
	6.52 AH/0.652A	(10hr, 1.80V/cell,25°C/77°F)
	5.80 AH/1.16A	(5hr, 1.75V/cell,25°C/77°F)
	3.98 AH/3.98A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	112.5A (5s)	
Internal Resistance	Approx 23.0mΩ	
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 2.25A. 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	7.46	6.20	4.81	3.81	3.09	2.02	1.52	1.24	1.05	0.734	0.625	0.332	0.149	0.073
1.80V/cell	8.27	6.82	5.19	4.05	3.25	2.15	1.60	1.30	1.10	0.770	0.652	0.342	0.152	0.075
1.75V/cell	9.18	7.47	5.59	4.33	3.51	2.25	1.69	1.36	1.16	0.793	0.666	0.349	0.154	0.076
1.70V/cell	10.0	8.16	6.14	4.52	3.71	2.38	1.77	1.42	1.21	0.822	0.687	0.356	0.156	0.077
1.65V/cell	10.6	8.61	6.47	4.80	3.83	2.46	1.84	1.47	1.23	0.844	0.702	0.365	0.159	0.078
1.60V/cell	11.6	9.35	6.87	4.98	3.98	2.56	1.90	1.51	1.28	0.867	0.718	0.373	0.162	0.079

### 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	14.1	11.8	9.27	7.40	6.03	3.97	2.99	2.45	2.08	1.46	1.25	0.664	0.300	0.147
1.80V/cell	15.4	12.8	9.85	7.77	6.31	4.19	3.13	2.56	2.17	1.53	1.30	0.684	0.304	0.151
1.75V/cell	16.9	13.9	10.5	8.26	6.77	4.37	3.30	2.66	2.28	1.57	1.33	0.697	0.308	0.152
1.70V/cell	18.2	15.0	11.5	8.60	7.13	4.60	3.45	2.77	2.37	1.63	1.37	0.711	0.312	0.153
1.65V/cell	19.2	15.8	12.0	9.09	7.35	4.74	3.57	2.86	2.41	1.67	1.40	0.727	0.317	0.155
1.60V/cell	20.6	16.9	12.7	9.33	7.55	4.90	3.66	2.94	2.49	1.71	1.43	0.743	0.322	0.157

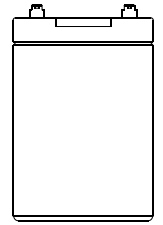
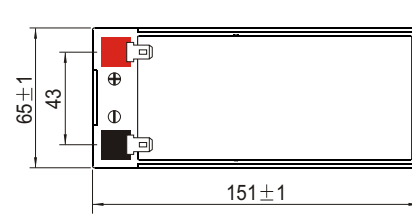
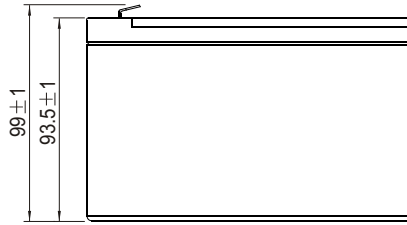
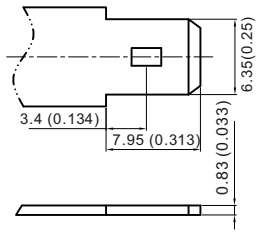
Specifications subject to change without notice.



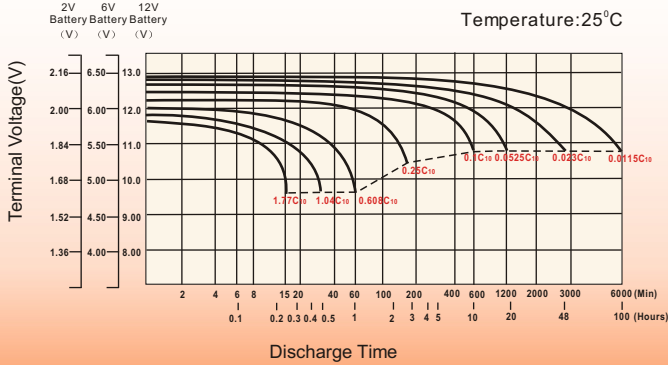
## Dimensions

### T2 Terminal

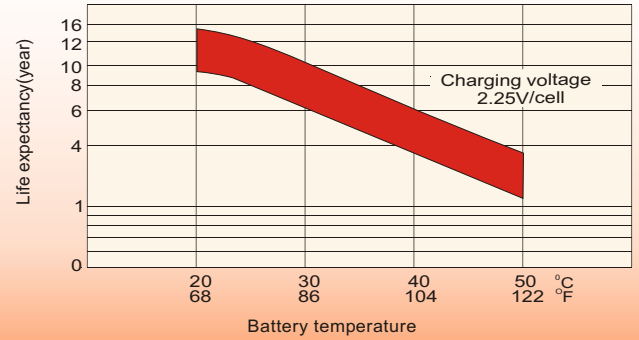
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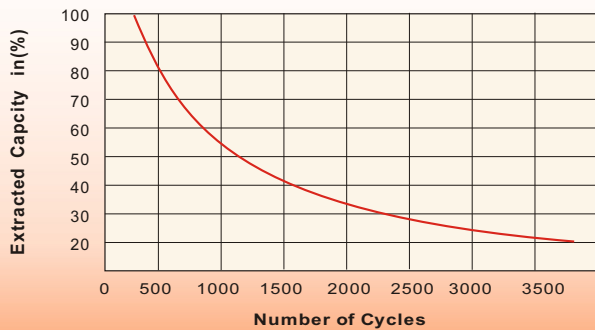
## Discharge Characteristics



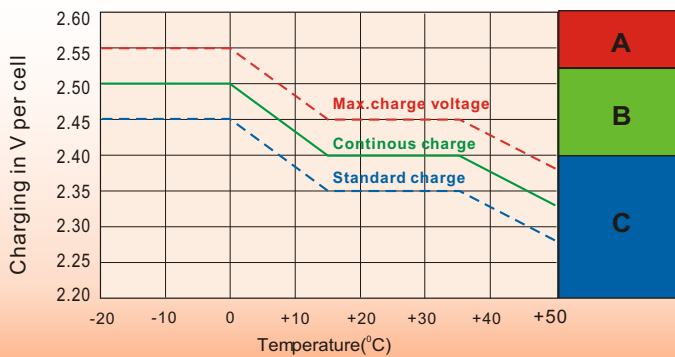
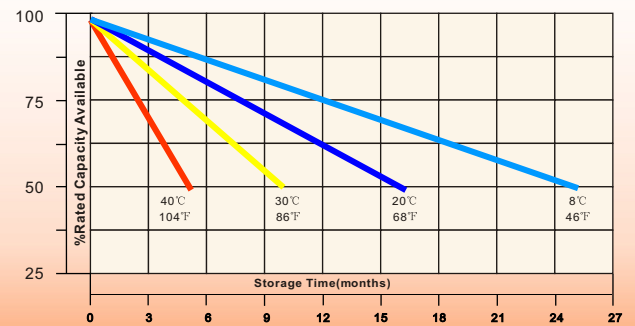
## Effect of Temperature on Long Term Float Life



## 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

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