



LPS SERIES-Solar Power

LPS12-30 (12V30AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	30.0AH	
Dimension	Length	165±2mm (6.50 inches)
	Width	125±2mm (4.92 inches)
	Container Height	175±2mm (6.89 inches)
	Total Height (with Terminal)	175±2mm (6.89 inches)
Approx Weight	Approx 9.1 Kg (20.1 lbs)	
Terminal	T3-A	
Container Material	ABS	
Rated Capacity	30.0 AH/0.3A	(100hr, 1.80V/cell, 25°C/77°F)
	27.4 AH/1.37A	(20hr, 1.80V/cell, 25°C/77°F)
	26.0 AH/2.60A	(10hr, 1.80V/cell, 25°C/77°F)
	23.1 AH/4.63A	(5hr, 1.75V/cell, 25°C/77°F)
	15.9 AH/15.9A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	390A (5s)	
Internal Resistance	Approx 14.0mΩ	
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	7.8A. 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	29.8	24.7	19.2	15.2	12.3	8.06	6.05	4.96	4.19	2.93	2.49	1.32	0.596	0.293
1.80V/cell	33.0	27.2	20.7	16.1	13.0	8.58	6.38	5.20	4.40	3.07	2.60	1.37	0.605	0.300
1.75V/cell	36.6	29.8	22.3	17.3	14.0	8.99	6.76	5.42	4.63	3.16	2.66	1.39	0.615	0.302
1.70V/cell	40.0	32.5	24.5	18.0	14.8	9.47	7.06	5.65	4.81	3.28	2.74	1.42	0.622	0.306
1.65V/cell	42.3	34.3	25.8	19.1	15.3	9.80	7.32	5.85	4.92	3.37	2.80	1.45	0.633	0.310
1.60V/cell	46.4	37.3	27.4	19.8	15.9	10.2	7.57	6.03	5.09	3.46	2.86	1.49	0.644	0.313

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	56.1	47.1	37.0	29.5	24.1	15.8	11.9	9.78	8.30	5.84	4.98	2.65	1.20	0.588
1.80V/cell	61.4	51.0	39.3	31.0	25.1	16.7	12.5	10.2	8.67	6.10	5.19	2.73	1.21	0.600
1.75V/cell	67.2	55.4	41.9	32.9	27.0	17.4	13.2	10.6	9.09	6.27	5.29	2.78	1.23	0.604
1.70V/cell	72.4	60.0	45.8	34.3	28.4	18.3	13.7	11.0	9.44	6.50	5.46	2.83	1.24	0.611
1.65V/cell	76.4	63.1	48.0	36.2	29.3	18.9	14.2	11.4	9.62	6.66	5.57	2.90	1.26	0.620
1.60V/cell	82.1	67.5	50.5	37.2	30.1	19.6	14.6	11.7	9.91	6.82	5.69	2.96	1.28	0.624

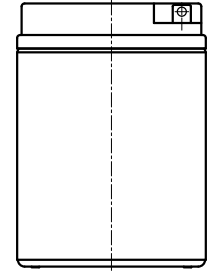
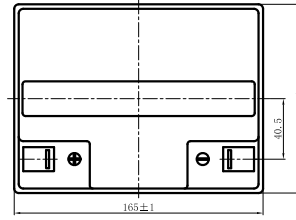
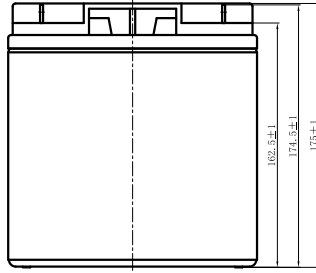
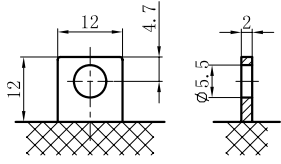
Specifications subject to change without notice.



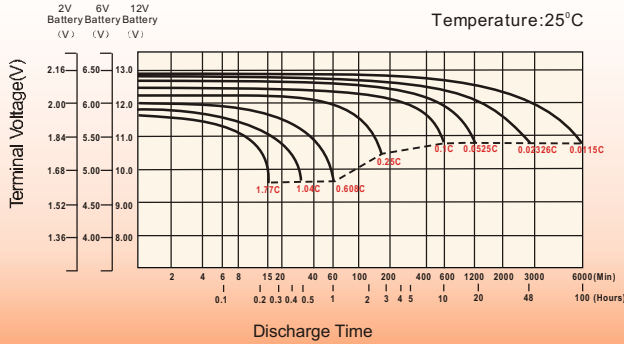
Dimensions

T3-A Terminal

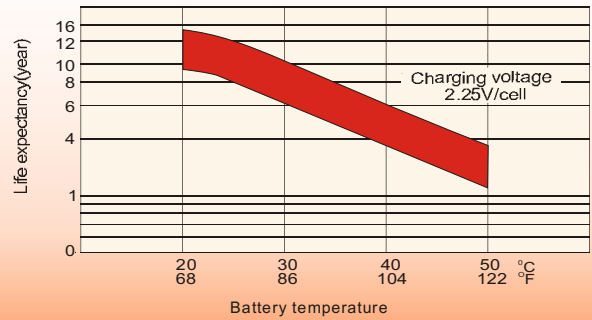
Unit: mm [inches]



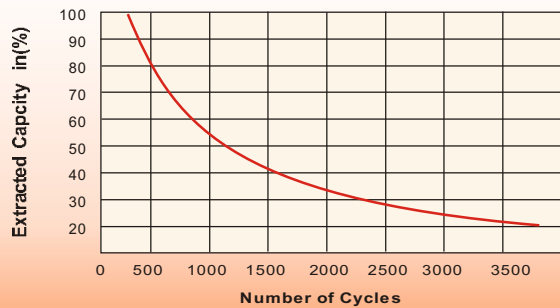
Discharge Characteristics



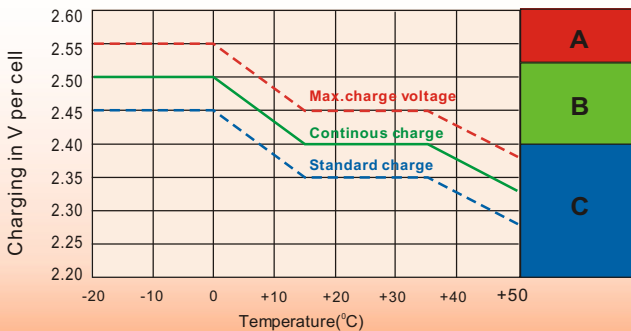
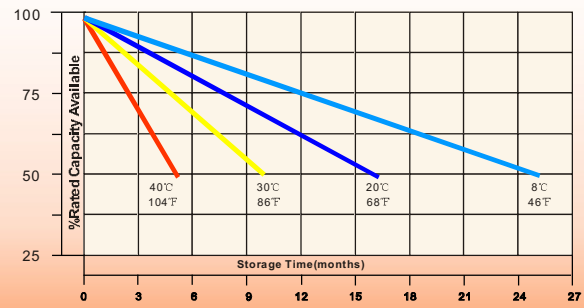
Effect of Temperature on Long Term Float Life



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

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