

# LPS SERIES-Solar Power

## LPS12-135 (12V138AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	138.0AH	
Dimension	Length	408±3mm (16.06 inches)
	Width	177±2mm (6.97 inches)
	Container Height	225±3mm (8.86 inches)
	Total Height (with Terminal)	225±3mm (8.86 inches)
	Approx Weight	Approx 37.6 Kg (82.9 lbs)
Terminal	T11	
Container Material	ABS	
Rated Capacity	138.0 AH/1.38A	(100hr, 1.80V/cell, 25°C/77°F)
	126 AH/6.30A	(20hr, 1.80V/cell, 25°C/77°F)
	120.0 AH/12.0A	(10hr, 1.80V/cell, 25°C/77°F)
	104.5 AH/20.9A	(5hr, 1.75V/cell, 25°C/77°F)
	72.9 AH/72.9A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1300A (5s)	
Internal Resistance	Approx 4.0mΩ	
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 36.0A. 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	136.5	113.4	88.1	69.8	56.5	36.8	27.8	22.7	19.2	13.4	11.5	6.11	2.75	1.35
1.80V/cell	151.3	124.7	95.0	74.1	59.5	39.1	29.3	23.8	20.2	14.1	12.0	6.30	2.79	1.38
1.75V/cell	167.9	136.6	102.2	79.2	64.2	41.0	30.9	24.9	20.9	14.5	12.3	6.43	2.84	1.39
1.70V/cell	183.4	149.2	112.3	82.7	67.8	43.2	32.4	25.9	21.8	15.0	12.6	6.56	2.87	1.41
1.65V/cell	194.2	157.5	118.3	87.8	70.1	44.7	33.6	26.8	22.6	15.4	12.9	6.71	2.92	1.43
1.60V/cell	212.9	171.0	125.8	91.0	72.9	46.6	34.7	27.7	23.3	15.9	13.2	6.87	2.97	1.45

### 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	256.1	214.9	168.8	134.8	109.8	71.8	54.4	44.7	37.9	26.6	22.9	12.2	5.50	2.71
1.80V/cell	280.1	232.9	179.3	141.4	114.8	75.9	57.0	46.6	39.6	27.9	23.8	12.5	5.57	2.76
1.75V/cell	306.9	252.7	191.3	150.4	123.2	79.2	60.0	48.5	40.9	28.6	24.3	12.8	5.65	2.77
1.70V/cell	330.7	273.9	209.0	156.5	129.7	83.2	62.8	50.4	42.5	29.7	25.1	13.0	5.71	2.81
1.65V/cell	348.8	288.0	219.3	165.4	133.7	85.9	64.9	52.1	43.9	30.4	25.6	13.3	5.80	2.85
1.60V/cell	374.6	308.2	230.5	169.8	137.8	88.7	66.7	53.4	45.2	31.1	26.1	13.6	5.90	2.87

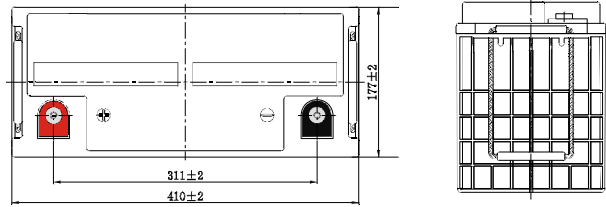
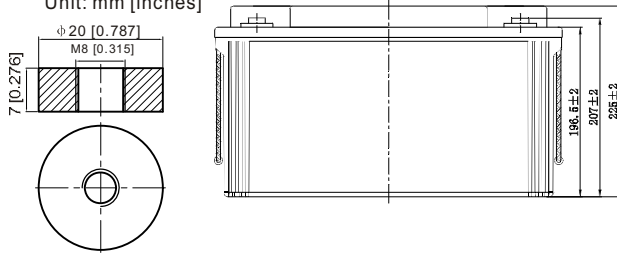
Specifications subject to change without notice.



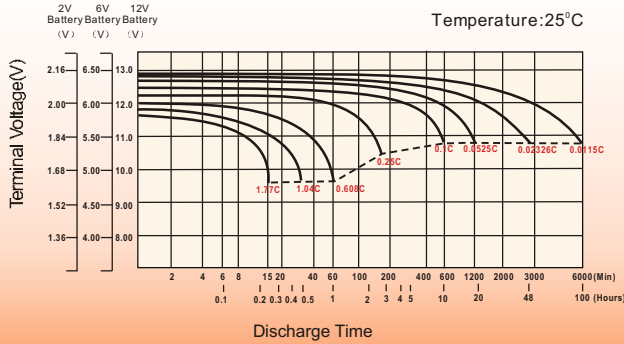
## Dimensions

### T11 Terminal

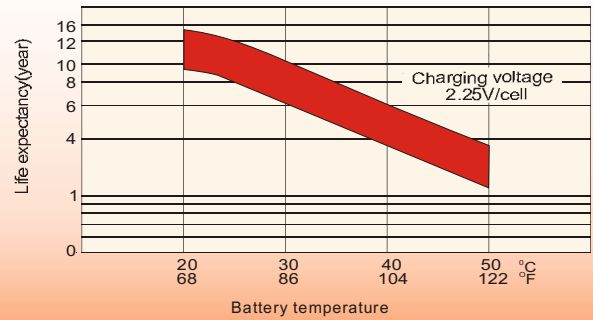
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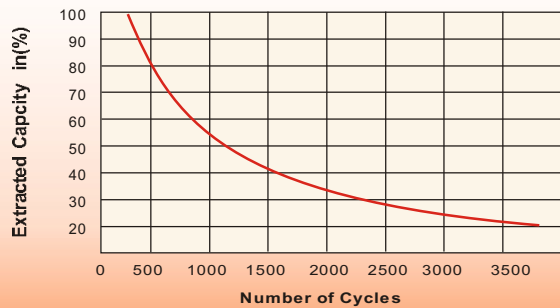
## Discharge Characteristics



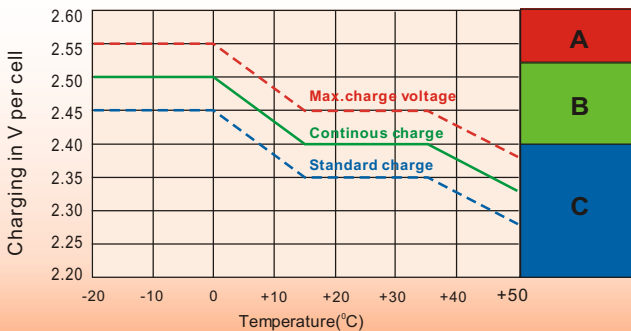
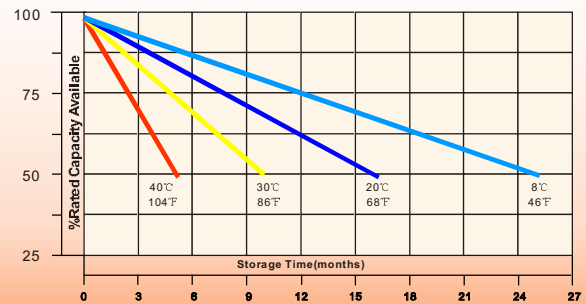
## Effect of Temperature on Long Term Float Life



## 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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