

LPS SERIES-Solar Power

LPS12-285 (12V287.5AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	287.5AH	
Dimension	Length	522±3mm (20.55 inches)
	Width	268±2mm (10.55 inches)
	Container Height	220±2mm (8.66 inches)
	Total Height (with Terminal)	226±2mm (8.90 inches)
	Approx Weight	Approx 78.0 Kg (172.0 lbs)
Terminal	T8	
Container Material	ABS	
Rated Capacity	287.5 AH/2.88A	(100hr, 1.80V/cell, 25°C/77°F)
	262.0 AH/13.1A	(20hr, 1.80V/cell, 25°C/77°F)
	250.0 AH/25.0A	(10hr, 1.80V/cell, 25°C/77°F)
	218.0 AH/43.6A	(5hr, 1.75V/cell, 25°C/77°F)
	151.9 AH/151.9A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	2500A (5s)	
Internal Resistance	Approx 2.5mΩ	
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 75.0A. 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	284.4	236.3	183.5	145.3	117.6	76.6	57.8	47.4	40.1	28.0	24.0	12.7	5.73	2.82
1.80V/cell	315.3	259.9	198.0	154.3	124.0	81.5	61.0	49.7	42.0	29.3	25.0	13.1	5.82	2.88
1.75V/cell	349.7	284.7	213.0	165.0	133.7	85.4	64.4	51.8	43.6	30.2	25.5	13.4	5.91	2.90
1.70V/cell	382.1	310.9	234.0	172.3	141.3	90.0	67.5	54.0	45.4	31.3	26.3	13.7	5.98	2.94
1.65V/cell	404.6	328.1	246.5	183.0	146.1	93.1	70.0	55.9	47.0	32.2	26.9	14.0	6.09	2.98
1.60V/cell	443.5	356.3	262.0	189.7	151.9	97.0	72.3	57.7	48.6	33.0	27.5	14.3	6.19	3.01

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

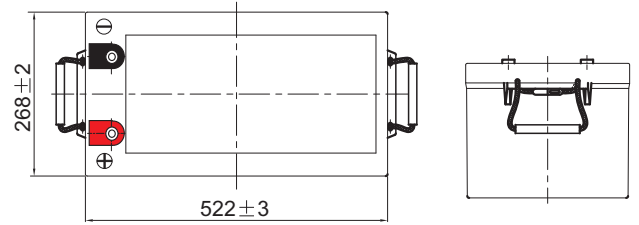
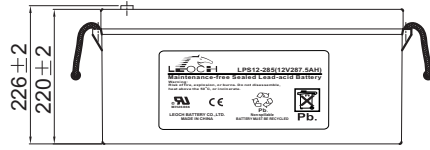
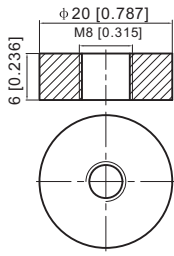
F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	48h	100h
1.85V/cell	533.5	447.7	351.6	280.8	228.7	149.6	113.2	93.0	78.9	55.5	47.6	25.3	11.5	5.64
1.80V/cell	583.5	485.2	373.6	294.6	239.2	158.0	118.8	97.0	82.4	58.1	49.6	26.1	11.6	5.74
1.75V/cell	639.4	526.5	398.6	313.3	256.7	164.9	125.0	101.0	85.3	59.6	50.7	26.6	11.8	5.78
1.70V/cell	688.9	570.7	435.5	326.1	270.3	173.4	130.7	105.1	88.6	61.8	52.2	27.1	11.9	5.85
1.65V/cell	726.7	600.1	456.9	344.7	278.6	178.9	135.3	108.5	91.5	63.4	53.3	27.7	12.1	5.93
1.60V/cell	780.4	642.1	480.2	353.7	287.0	184.9	138.9	111.4	94.3	64.9	54.4	28.3	12.3	5.97



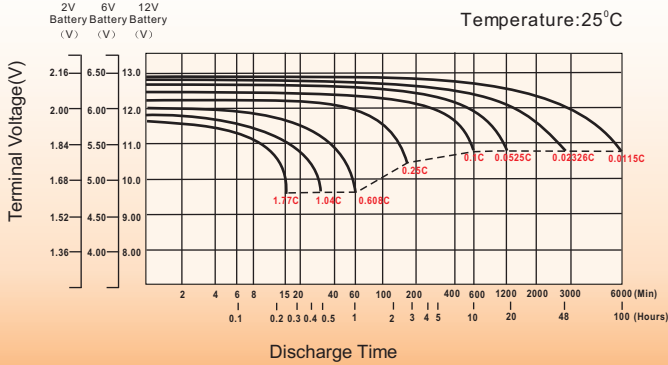
Dimensions

T8 Terminal

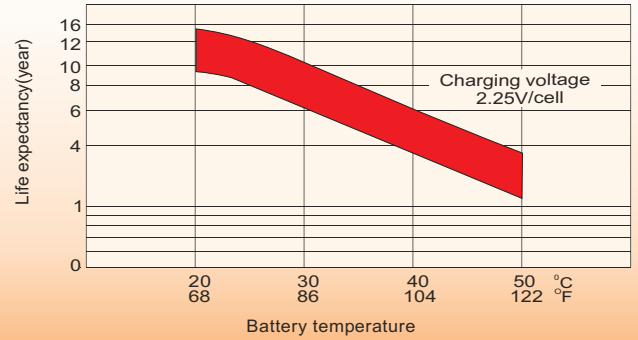
Unit: mm [inches]



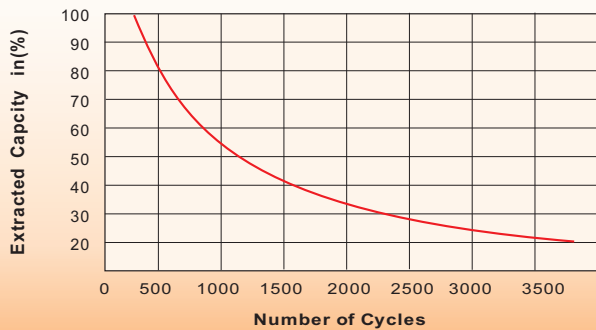
Discharge Characteristics



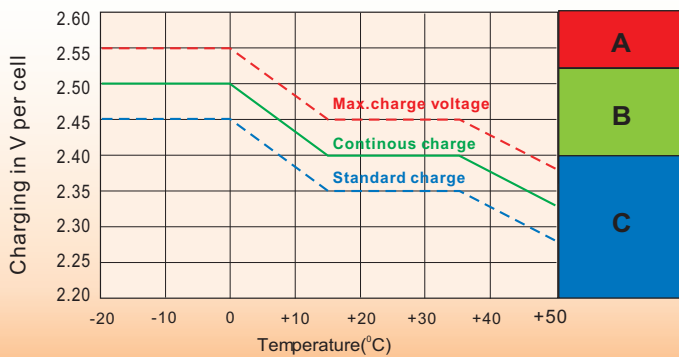
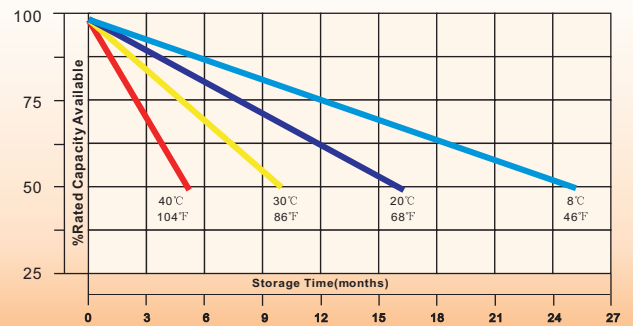
Effect of Temperature on Long Term Float Life



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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