



# LPS SERIES-Solar Power

## LPS12-160 (12V161AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	161.0AH	
Dimension	Length	345 ± 3mm (13.6 inches)
	Width	172 ± 2mm (6.77 inches)
	Container Height	274 ± 3mm (10.79 inches)
	Total Height (with Terminal)	280 ± 3mm (11.02 inches)
	Approx Weight	Approx 45.5 Kg (100.3 lbs)
Terminal	T11	
Container Material	ABS	
Rated Capacity	161.0 AH/1.61A	(100hr, 1.80V/cell, 25°C/77°F)
	147.0 AH/7.35A	(20hr, 1.80V/cell, 25°C/77°F)
	140.0 AH/14.0A	(10hr, 1.80V/cell, 25°C/77°F)
	122.2 AH/24.4A	(5hr, 1.75V/cell, 25°C/77°F)
	85.1 AH/85.1A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1400A (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 42.0A. 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	B&P 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	159.3	132.3	102.8	81.4	65.9	42.9	32.4	26.5	22.4	15.7	13.4	7.13	3.21	1.58
1.80V/cell	176.6	145.5	110.9	86.4	69.4	45.6	34.2	27.8	23.5	16.4	14.0	7.35	3.26	1.61
1.75V/cell	195.8	159.4	119.3	92.4	74.9	47.8	36.1	29.0	24.4	16.9	14.3	7.50	3.31	1.63
1.70V/cell	214.0	174.1	131.0	96.5	79.1	50.4	37.8	30.3	25.4	17.6	14.8	7.65	3.35	1.65
1.65V/cell	226.6	183.7	138.0	102.5	81.8	52.2	39.2	31.3	26.3	18.0	15.1	7.83	3.41	1.67
1.60V/cell	248.3	199.5	146.7	106.2	85.1	54.3	40.5	32.3	27.2	18.5	15.4	8.02	3.47	1.69

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

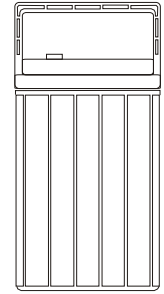
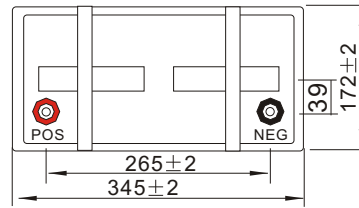
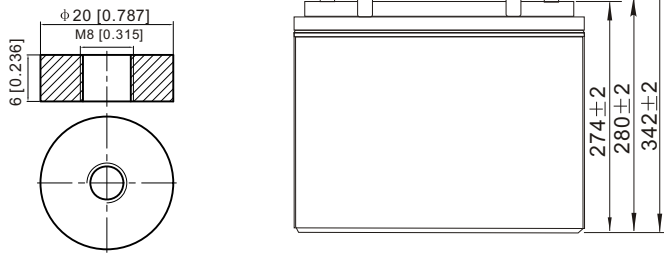
F.V/Time	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	48h	100h
1.85V/cell	298.8	250.7	196.9	157.3	128.1	83.8	63.4	52.1	44.2	31.1	26.7	14.2	6.41	3.16
1.80V/cell	326.8	271.7	209.2	165.0	133.9	88.5	66.5	54.3	46.2	32.5	27.8	14.6	6.50	3.22
1.75V/cell	358.1	294.8	223.2	175.5	143.8	92.4	70.0	56.6	47.8	33.4	28.4	14.9	6.59	3.24
1.70V/cell	385.8	319.6	243.9	182.6	151.4	97.1	73.2	58.8	49.6	34.6	29.2	15.2	6.66	3.28
1.65V/cell	407.0	336.0	255.8	193.0	156.0	100.2	75.8	60.8	51.2	35.5	29.9	15.5	6.77	3.32
1.60V/cell	437.0	359.6	268.9	198.1	160.7	103.5	77.8	62.4	52.8	36.3	30.5	15.9	6.88	3.35



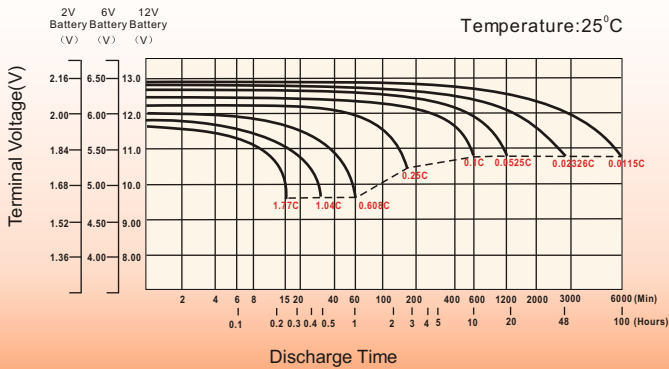
# Dimensions

## T11 Terminal

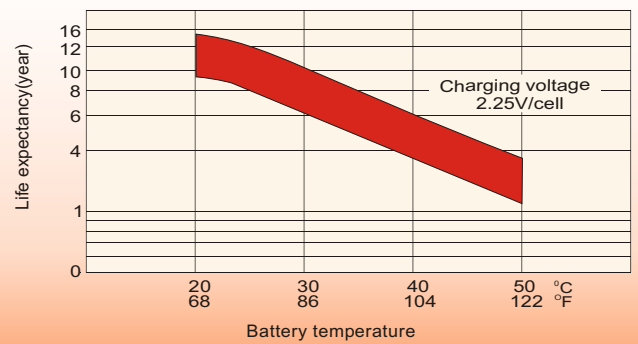
Unit: mm [inches]



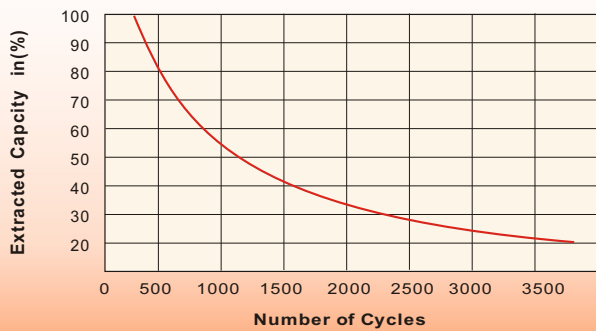
## Discharge Characteristics



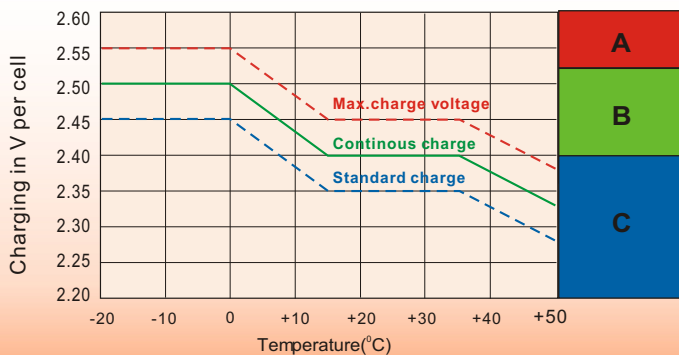
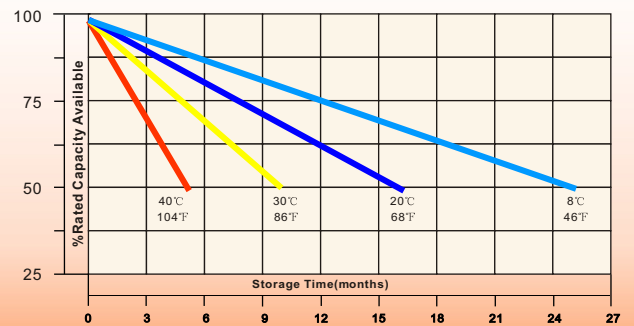
## Effect of Temperature on Long Term Float Life



## 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