



# LPS SERIES-Solar Power

## LPS12-115 (12V115AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(100HR)	115.0AH	
Dimension	Length	305±2mm (12.01 inches)
	Width	168±2mm (6.61 inches)
	Container Height	207±2mm (8.15 inches)
	Total Height (with Terminal)	229±2mm (9.01 inches)
	Approx Weight	Approx 31.5Kg (69.5 lbs)
Terminal	T14	
Container Material	ABS	
Rated Capacity	115.0 AH/1.15A	(100hr, 1.80V/cell, 25°C/77°F)
	105.0 AH/5.25A	(20hr, 1.80V/cell, 25°C/77°F)
	100.0 AH/10.0A	(10hr, 1.80V/cell, 25°C/77°F)
	87.0 AH/17.4A	(5hr, 1.75V/cell, 25°C/77°F)
	60.8 AH/60.8A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1200A (5s)	
Internal Resistance	Approx 4.9mΩ	
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	30.0A. 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	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	113.8	94.5	73.4	58.1	47.0	30.7	23.1	19.0	16.0	11.2	9.58	5.09	2.29	1.13
1.80V/cell	126.1	103.9	79.2	61.7	49.6	32.6	24.4	19.9	16.8	11.7	10.0	5.25	2.33	1.15
1.75V/cell	139.9	113.9	85.2	66.0	53.5	34.2	25.8	20.7	17.5	12.1	10.2	5.36	2.36	1.16
1.70V/cell	152.8	124.4	93.6	68.9	56.5	36.0	27.0	21.6	18.2	12.5	10.5	5.47	2.39	1.18
1.65V/cell	161.8	131.2	98.6	73.2	58.5	37.3	28.0	22.4	18.8	12.9	10.8	5.60	2.44	1.19
1.60V/cell	177.4	142.5	104.8	75.9	60.8	38.8	28.9	23.1	19.5	13.2	11.0	5.73	2.48	1.20

### 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	213.4	179.1	140.6	112.3	91.5	59.8	45.3	37.2	31.6	22.2	19.1	10.1	4.58	2.26
1.80V/cell	233.4	194.1	149.4	117.8	95.7	63.2	47.5	38.8	33.0	23.2	19.9	10.4	4.64	2.30
1.75V/cell	255.8	210.6	159.4	125.3	102.7	66.0	50.0	40.4	34.1	23.9	20.3	10.6	4.71	2.31
1.70V/cell	275.6	228.3	174.2	130.4	108.1	69.4	52.3	42.0	35.4	24.7	20.9	10.8	4.76	2.34
1.65V/cell	290.7	240.0	182.7	137.9	111.5	71.5	54.1	43.4	36.6	25.3	21.3	11.1	4.84	2.37
1.60V/cell	312.2	256.8	192.1	141.5	114.8	74.0	55.6	44.5	37.7	25.9	21.8	11.3	4.91	2.39



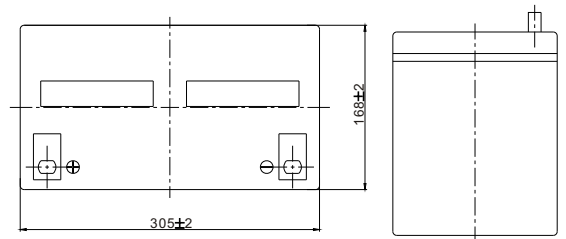
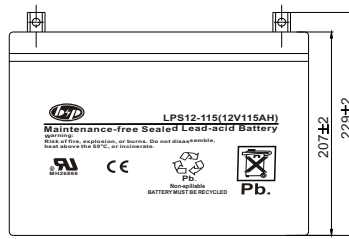
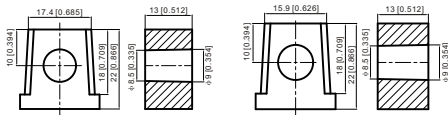
# Dimensions

Unit: mm (inches)

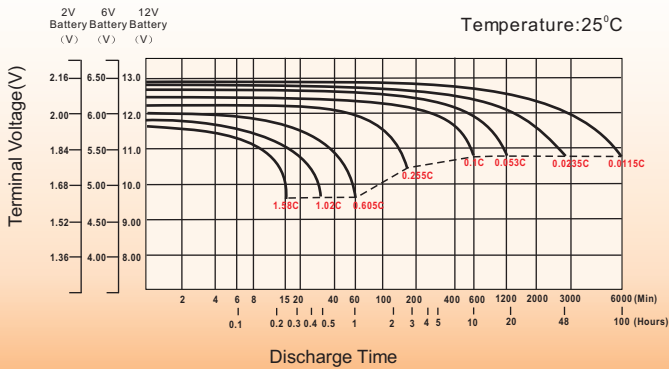
Terminal: T14

■ T14-1 Positive

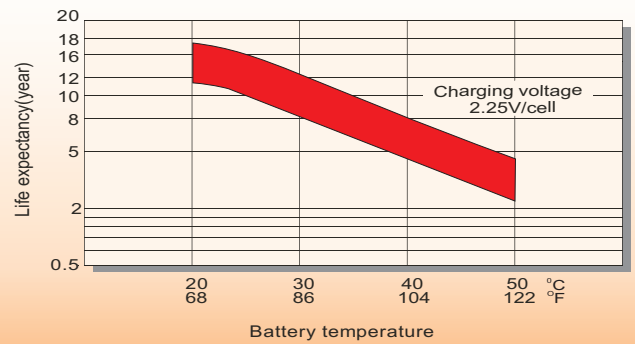
■ T14-2 Negative



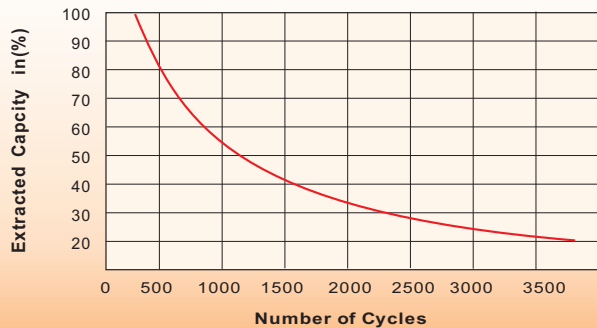
## Discharge Characteristics



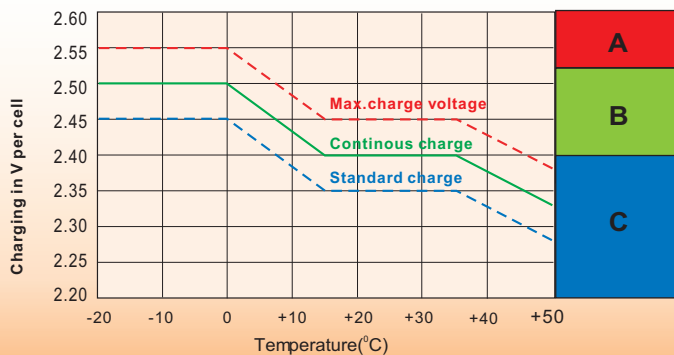
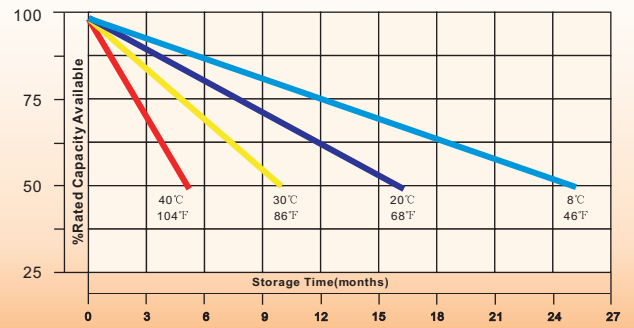
## Effect of Temperature on Long Term Float Life



## 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