

# LPL Series-Long Standby Life

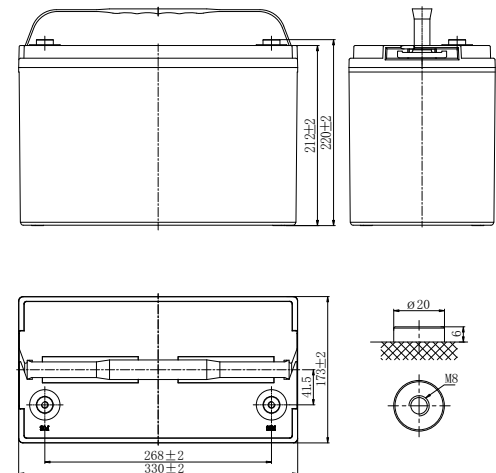
## LPL12-100(12V100Ah)

### Specifications

Rated Voltage	12V	
Nominal Capacity	100.0Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	330±2mm (12.99 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±2mm (8.35 inches)
	Total Height	220±2mm (8.66 inches)
Approx Weight	32.0 Kg (70.56 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	107.0 Ah	(20hr, 5.35A, 1.80V/cell)
	100.0 Ah	(10hr, 10.0A, 1.80V/cell)
	94.5 Ah	(5hr, 18.9A, 1.75V/cell)
	86.1 Ah	(3hr, 28.7A, 1.75V/cell)
	75.7 Ah	(1hr, 75.7A, 1.60V/cell)
Max. Discharge Current	1000A (5s)	
Internal Resistance (25°C)	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	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LPL 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.	



### Layout



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	138.1	124.6	109.3	92.9	69.4	58.5	37.2	26.2	21.2	17.2	15.1	11.3	9.7	5.2
1.80V/cell	176.5	150.5	129.2	103.6	77.8	63.7	40.0	28.2	22.7	18.4	16.2	11.9	10.0	5.4
1.75V/cell	193.9	164.5	139.0	111.4	83.8	68.5	42.0	28.7	23.2	18.9	16.6	12.3	10.3	5.5
1.70V/cell	211.4	175.5	146.0	116.0	87.1	70.8	43.8	29.5	23.8	19.4	16.9	12.8	10.7	5.6
1.65V/cell	228.1	186.6	155.1	122.3	89.3	73.1	44.9	30.8	24.6	19.9	17.3	13.2	11.0	5.8
1.60V/cell	247.7	199.6	165.2	129.1	93.1	75.7	46.5	31.7	25.4	20.6	17.7	13.4	11.2	5.9

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	257.9	235.0	208.1	178.8	134.8	114.1	72.9	51.6	41.9	34.0	29.9	22.5	19.4	10.3
1.80V/cell	325.7	280.1	242.4	196.5	149.9	123.5	77.9	55.2	44.5	36.3	32.0	23.7	20.0	10.7
1.75V/cell	352.2	302.3	258.3	209.6	160.0	132.3	81.6	56.0	45.5	37.2	32.7	24.4	20.5	11.0
1.70V/cell	375.3	318.2	269.5	217.0	165.8	136.1	84.7	57.5	46.5	38.0	33.4	25.4	21.3	11.2
1.65V/cell	401.4	335.9	284.2	227.0	168.4	139.7	86.7	59.7	47.9	39.0	34.0	26.1	21.9	11.6
1.60V/cell	425.9	353.3	299.4	238.0	174.6	143.9	89.1	61.2	49.3	40.1	34.6	26.4	22.2	11.7

# LPL Series-Long Standby Life

## LPL12-100(12V100Ah)

### Applications

- UPS and EPS
- Emergency light
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply, DC power supply

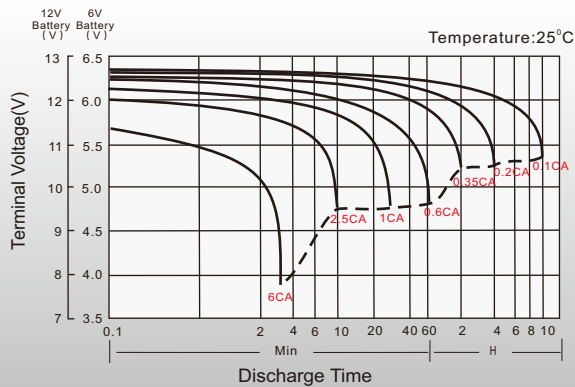
### General Features

- 10 years design life(25°C)
- Grid refining technology and the thicker plates are used to extend the battery standby life and reduce the plate grid corrosion speed
- Using oxygen recombination technology: maintenance-free
- Unique vent valve design: control water losing, prevent air and spark going inside

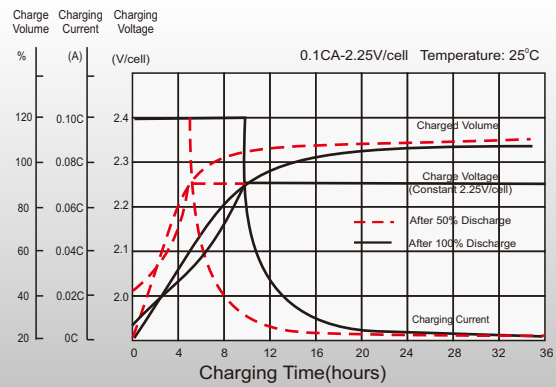
### Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

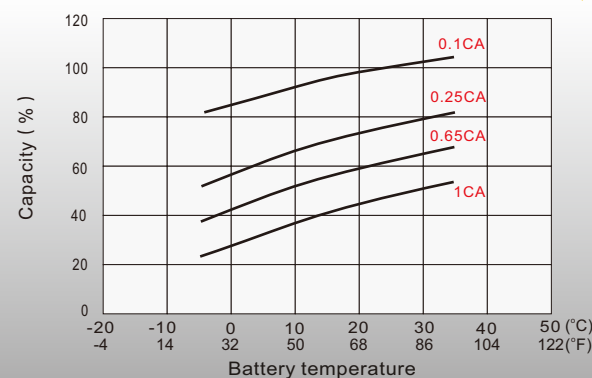
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

