

# LPL Series-Long Life Standby LPL12-100(12V105Ah)

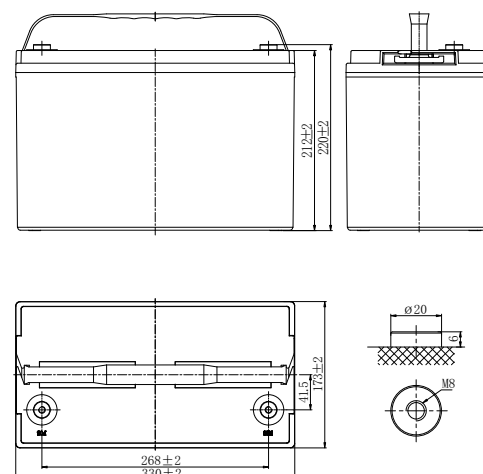


## Specifications

Rated Voltage	12V	
Nominal Capacity	C <sub>20</sub> , 1.80V/cell	105Ah
Dimension	Length	330±2mm (13.0 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±2mm (8.35 inches)
	Total Height	220±2mm (8.66 inches)
Approx Weight	30.5kg (67.2 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity(25°C)	105.0 Ah	C20(5.25A, 1.80V/cell)
	100.0 Ah	C10(10.0A, 1.80V/cell)
	84.5 Ah	C5(16.9A, 1.75V/cell)
	77.1 Ah	C3(25.7A, 1.75V/cell)
	58.1 Ah	C1(58.1A, 1.60V/cell)
Max. Discharge Current	1050A (5s)	
Internal Resistance(25°C)	Approx 5.0mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	-20 ~ 40°C (-4 ~ 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 31.5A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Standby Use	
Effect of temp. to Capacity	Initial Charging Current less than 31.5A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
	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	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	197.7	140.5	121.9	78.8	58.9	50.9	37.7	31.7	23.2	18.2	15.8	13.9	10.7	9.55	5.07
1.80V/cell	224.8	159.5	138.1	85.8	62.4	52.7	38.9	32.7	25.2	19.4	16.6	15.0	11.3	10.0	5.25
1.75V/cell	244.2	173.0	149.5	87.6	64.6	55.3	40.9	34.4	25.7	19.8	16.9	15.1	11.3	10.1	5.30
1.70V/cell	261.0	184.5	158.8	89.3	65.9	56.4	41.7	35.1	26.2	20.2	17.2	15.2	11.5	10.2	5.36
1.65V/cell	270.1	190.3	163.4	90.7	66.9	57.3	42.4	35.6	26.4	20.5	17.6	15.2	11.7	10.3	5.42
1.60V/cell	279.7	196.8	168.5	92.0	67.9	58.1	43.0	36.1	26.7	20.7	17.8	15.3	11.8	10.5	5.49

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

F.V/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	369.1	264.4	230.7	150.7	113.2	98.5	73.0	61.6	45.4	35.7	31.1	27.5	21.3	19.0	10.1
1.80V/cell	412.9	295.8	258.1	162.7	119.2	101.4	75.1	63.3	49.0	38.0	32.6	29.5	22.3	19.9	10.4
1.75V/cell	440.7	315.7	275.4	164.8	122.7	106.0	78.6	66.3	49.9	38.6	33.1	29.6	22.4	20.0	10.5
1.70V/cell	463.3	331.9	289.6	166.7	124.3	107.5	79.8	67.4	50.6	39.1	33.5	29.7	22.7	20.2	10.6
1.65V/cell	470.9	337.2	294.3	167.9	125.4	108.5	80.6	68.1	50.9	39.6	34.1	29.8	23.0	20.4	10.7
1.60V/cell	477.4	342.0	298.4	168.6	126.1	109.3	81.2	68.6	51.1	39.9	34.4	29.9	23.2	20.6	10.9

# LPL Series-Long Life Standby LPL12-100(12V105Ah)



## 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

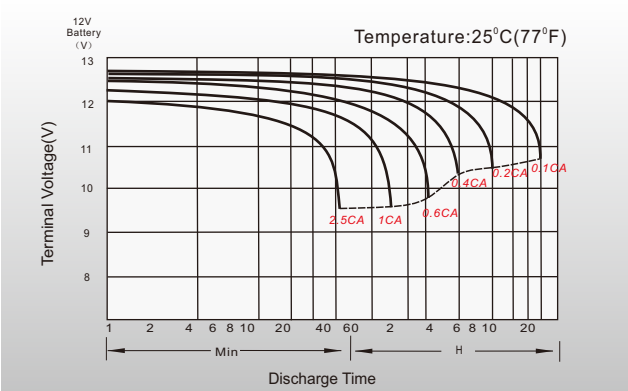
## General Features

- 12 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

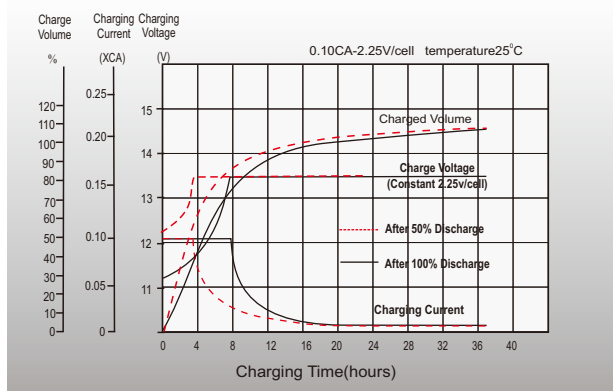
## Standards

- Compliance with IEC 60896 standards, EU Battery Directive

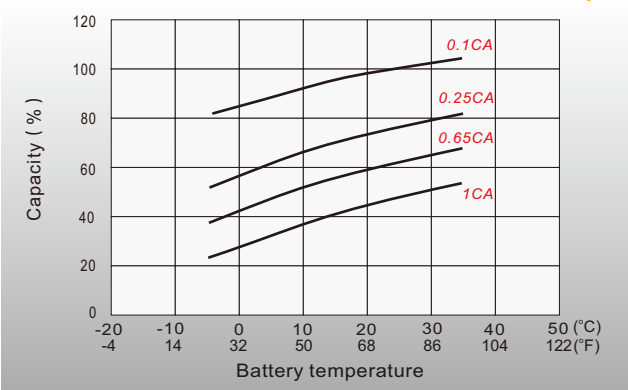
### Discharge Characteristics



### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life

