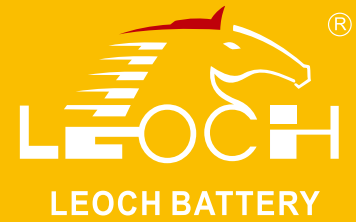




IEEE/UL Battery  
Sizing by  
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610-952-6067  
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# LPL Series-Long Life Standby LPL2-400M(2V400Ah)

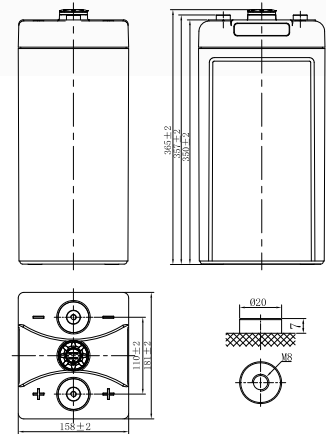


## Specifications

Rated Voltage	2V	
Nominal Capacity	C <sub>10</sub> , 1.80V/cell	400Ah
Dimension	Length	158±2mm (6.22 inches)
	Width	181±2mm (7.13 inches)
	Container Height	350±2mm (13.8 inches)
	Total Height	365±2mm (14.4 inches)
Approx Weight	22.7 Kg (50.0 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity(25°C)	424.0 Ah	(20hr, 21.2A, 1.80V/cell)
	400.0 Ah	(10hr, 40.0A, 1.80V/cell)
	350.0 Ah	(5hr, 70.0A, 1.75V/cell)
	312.0 Ah	(3hr, 104.0A, 1.75V/cell)
	252.7 Ah	(1hr, 252.7A, 1.60V/cell)
Max. Discharge Current	3200A (5s)	
Internal Resistance(25°C)	Approx 0.5mΩ	
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)	
Standby Use	Initial Charging Current less than 120A. Voltage 2.25V~2.30V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Cycle Use	Initial Charging Current less than 120A. Voltage 2.35V~2.40V at 25°C(77°F)Temp. Coefficient -5mV/°C	
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)

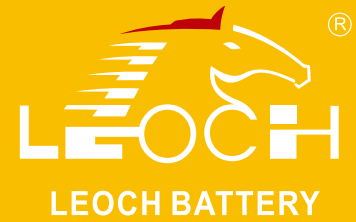
F.V/Time	30min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	252.6	183.1	169.0	112.4	93.6	75.3	63.5	55.2	44.8	37.5	20.1
1.80V/cell	278.2	199.9	173.8	122.9	101.3	81.2	68.4	59.2	48.0	40.0	21.2
1.75V/cell	322.7	221.5	182.5	135.4	104.0	83.2	70.0	60.4	48.9	40.6	21.5
1.70V/cell	348.2	248.1	187.5	139.8	107.0	85.3	71.6	61.7	49.7	41.3	21.7
1.67V/cell	358.3	250.3	189.3	142.9	108.7	86.5	72.5	62.4	50.3	41.6	21.9
1.60V/cell	378.0	252.7	192.0	146.3	112.7	89.4	74.7	64.2	51.4	42.5	22.3

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

F.V/Time	30min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	480.7	388.9	307.5	230.9	183.6	148.0	125.1	108.8	88.6	74.2	40.0
1.80V/cell	517.6	408.3	314.1	243.2	197.8	159.0	134.3	116.4	94.6	79.0	42.1
1.75V/cell	593.3	428.7	326.4	252.6	202.2	162.3	137.0	118.5	96.2	80.1	42.6
1.70V/cell	630.2	435.4	336.4	254.2	207.8	165.8	139.7	120.7	97.7	81.3	43.1
1.67V/cell	641.8	439.9	337.2	258.6	209.7	167.7	141.1	121.9	98.6	81.9	43.4
1.60V/cell	698.8	469.8	346.7	278.4	216.1	172.4	144.8	124.8	100.6	83.4	44.2



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# LPL Series-Long Life Standby LPL2-400M(2V400Ah)

## Applications

- Tele-communication central station (wired or cellular)
- Power system communication, military communication, etc.
- Network communication including: data transmission, television signal transmission, etc.
- Uninterruptable Power System (UPS- for Telecom)
- EPS

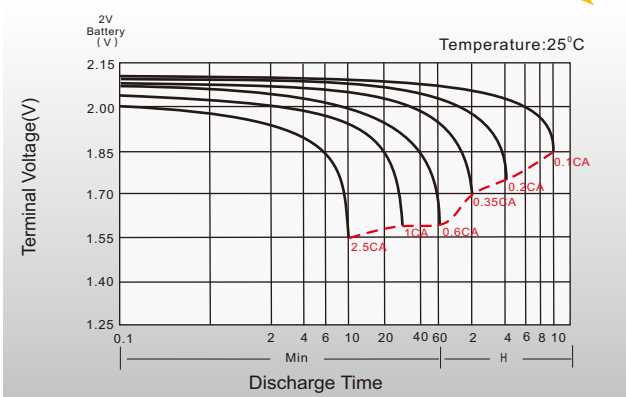
## General Features

- 16 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

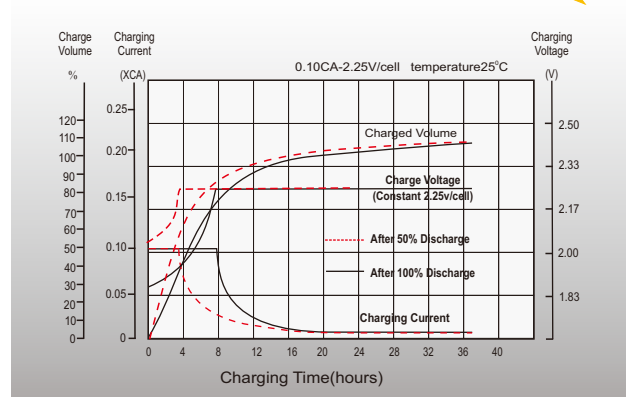
## Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch@IATF16949, ISO 45001,ISO 9001 and ISO 14001 certified production facilities

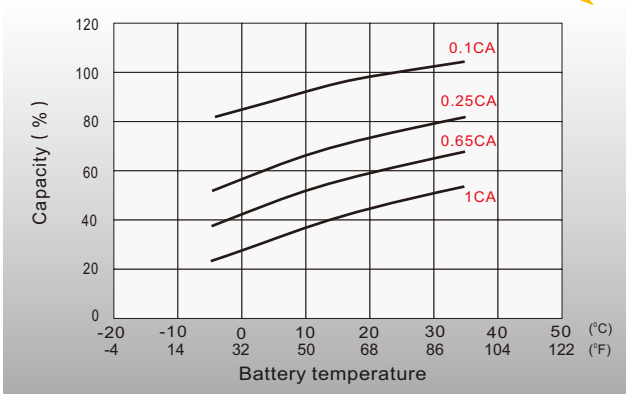
## Discharge Characteristics



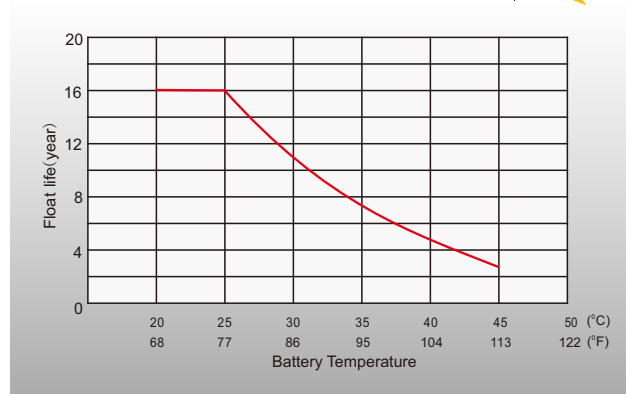
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



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