

LPL Series-Long Standby Life LPL12-24(12V24Ah)

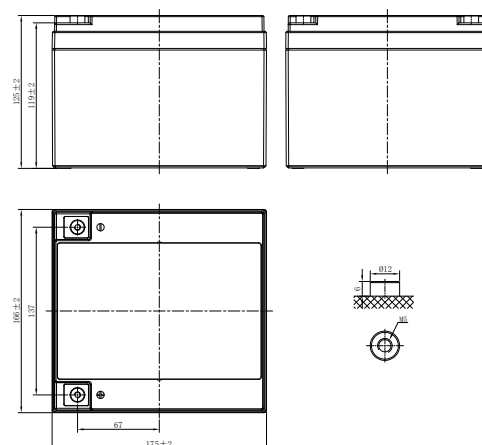


Specifications

Rated Voltage	12V	
Nominal Capacity	(C ₂₀ , 1.75V/cell)	24.0Ah
Dimension	Length	166±2mm (6.54 inches)
	Width	175±2mm (6.89 inches)
	Container Height	125±2mm (4.92 inches)
	Total Height	125±2mm (4.92 inches)
Approx Weight	7.60Kg (16.8 lbs)	
Terminal	M5	
Container Material	ABS	
Rated Capacity (25°C)	24.00 Ah	(20hr, 1.20A, 1.75V/cell)
	23.80 Ah	(10hr, 2.38A, 1.75V/cell)
	22.15 Ah	(5hr, 4.43A, 1.75V/cell)
	19.56 Ah	(3hr, 6.52A, 1.75V/cell)
	16.10 Ah	(1hr, 16.1A, 1.60V/cell)
Max. Discharge Current	360A (5s)	
Internal Resistance (25°C)	Approx 13mΩ	
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 7.2A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 7.2A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	45.9	37.3	31.6	23.8	18.0	14.8	8.46	6.33	5.07	4.32	3.69	2.90	2.33	1.18
1.80V/cell	48.2	38.8	32.6	24.4	18.4	15.0	8.59	6.43	5.15	4.38	3.74	2.94	2.35	1.19
1.75V/cell	50.6	40.2	33.5	25.0	18.8	15.3	8.73	6.52	5.22	4.43	3.79	2.97	2.38	1.20
1.70V/cell	52.9	41.6	34.5	25.5	19.1	15.6	8.86	6.62	5.29	4.49	3.84	3.01	2.41	1.21
1.65V/cell	54.4	42.5	35.1	25.9	19.3	15.7	8.95	6.67	5.33	4.53	3.87	3.03	2.43	1.22
1.60V/cell	57.6	44.4	36.5	26.7	19.9	16.1	9.13	6.81	5.43	4.61	3.94	3.08	2.46	1.24

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	87.8	71.7	60.8	46.0	35.0	28.7	16.6	12.4	10.0	8.52	7.31	5.75	4.62	2.35
1.80V/cell	91.7	74.1	62.4	46.9	35.6	29.1	16.8	12.6	10.1	8.63	7.39	5.82	4.67	2.37
1.75V/cell	95.7	76.4	63.9	47.8	36.1	29.6	17.0	12.8	10.2	8.73	7.47	5.89	4.73	2.40
1.70V/cell	99.6	78.7	65.6	48.7	36.7	30.0	17.2	12.9	10.4	8.83	7.56	5.95	4.78	2.42
1.65V/cell	101.9	80.1	66.5	49.3	37.0	30.2	17.4	13.0	10.4	8.89	7.61	5.99	4.81	2.44
1.60V/cell	107.2	83.2	68.6	50.5	37.8	30.8	17.6	13.2	10.6	9.02	7.73	6.09	4.88	2.47

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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

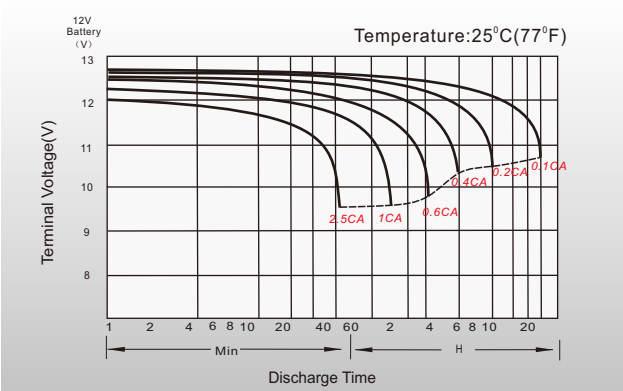
General Features

- 10 ~ 12 years design life(20°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

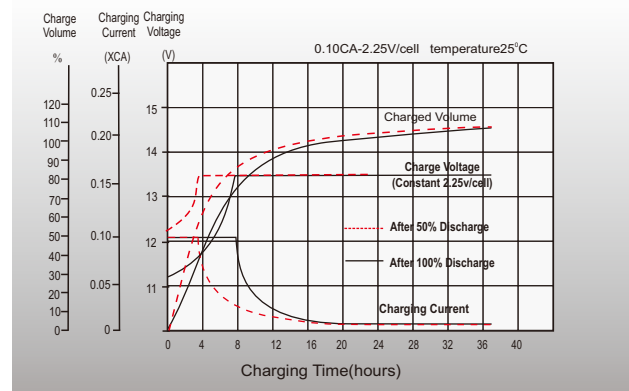
Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL Certified

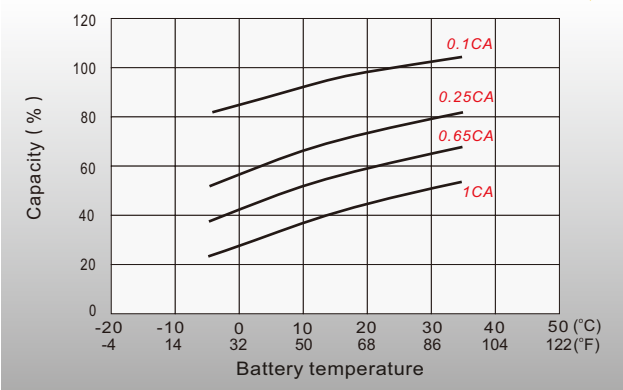
Discharge Characteristics



Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

