

LPL SERIES-Long Life Standby

LPL12-24 (12V24AH)

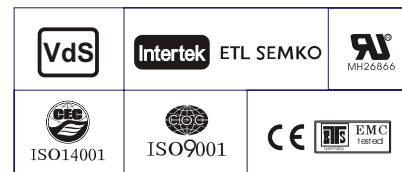
Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	24.0AH	
Dimension	Length	166±2mm (6.54 inches)
	Width	175±2mm (6.89 inches)
	Container Height	125±2mm (4.92 inches)
	Total Height (with Terminal)	125±2mm (4.92 inches)
Approx Weight	Approx 7.8Kg (17.20 lbs)	
Terminal	T3 / T2 / T 12	
Container Material	ABS	
Rated Capacity	25.4 AH/1.27A	(20hr , 1.80V/cell,25°C/77°F)
	24.0 AH/2.40A	(10hr, 1.80V/cell,25°C/77°F)
	20.8AH/4.16A	(5hr, 1.75V/cell,25°C/77°F)
	19.0 AH/6.32A	(3hr, 1.75V/cell,25°C/77°F)
	14.8 AH/14.8A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	360A (5s)	
Internal Resistance	Approx 14.0mΩ	
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 than7.2A.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	Leoch 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.	



Applications

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



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	31.0	25.8	22.0	18.0	13.6	11.4	7.28	5.77	4.67	3.78	3.31	2.65	2.27	1.26
1.80V/cell	39.6	31.2	26.0	21.2	15.8	12.8	7.94	6.21	4.99	4.06	3.56	2.82	2.40	1.27
1.75V/cell	43.5	34.1	28.0	22.0	16.4	13.4	8.24	6.32	5.11	4.16	3.65	2.86	2.42	1.28
1.70V/cell	47.4	36.4	29.4	22.9	17.1	13.8	8.57	6.50	5.24	4.27	3.73	2.90	2.45	1.31
1.65V/cell	51.1	38.7	31.3	24.2	17.5	14.3	8.81	6.77	5.42	4.39	3.81	2.95	2.50	1.32
1.60V/cell	55.5	41.4	33.3	25.5	18.2	14.8	9.10	6.98	5.59	4.53	3.89	2.98	2.52	1.33

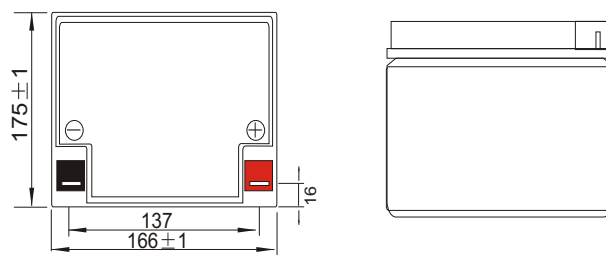
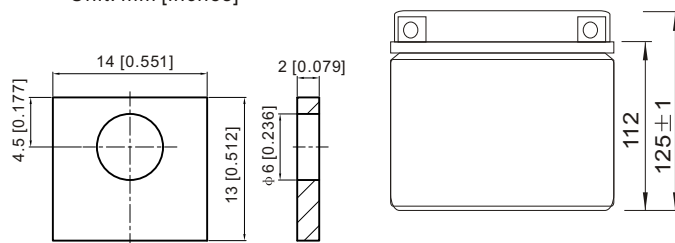
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	58.3	49.1	42.3	34.9	26.6	22.4	14.4	11.4	9.30	7.54	6.63	5.33	4.56	2.54
1.80V/cell	73.6	58.5	49.3	40.6	30.7	25.0	15.6	12.2	9.88	8.06	7.09	5.64	4.83	2.56
1.75V/cell	79.6	63.2	52.5	41.8	31.6	26.0	16.1	12.4	10.1	8.24	7.26	5.72	4.87	2.58
1.70V/cell	84.8	66.5	54.8	43.2	32.7	26.7	16.7	12.7	10.3	8.43	7.40	5.80	4.91	2.63
1.65V/cell	90.7	70.2	57.7	45.3	33.3	27.4	17.1	13.2	10.6	8.64	7.54	5.88	5.01	2.66
1.60V/cell	96.3	73.9	60.8	47.5	34.5	28.3	17.6	13.6	10.9	8.90	7.68	5.92	5.05	2.67

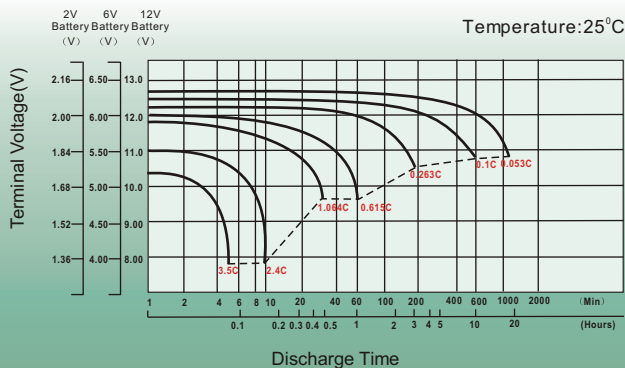
Dimensions

■ **T3 Terminal**
Unit: mm [inches]

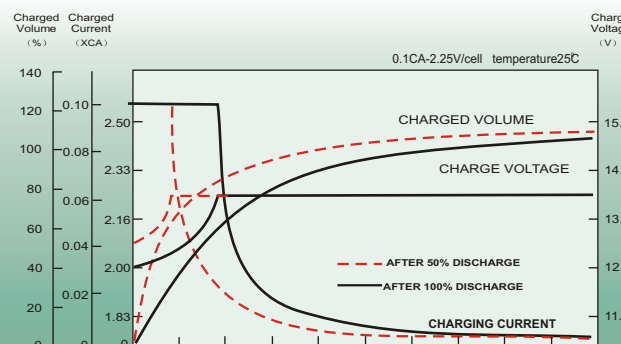
■ **T3 Terminal**
Unit: mm [inches]



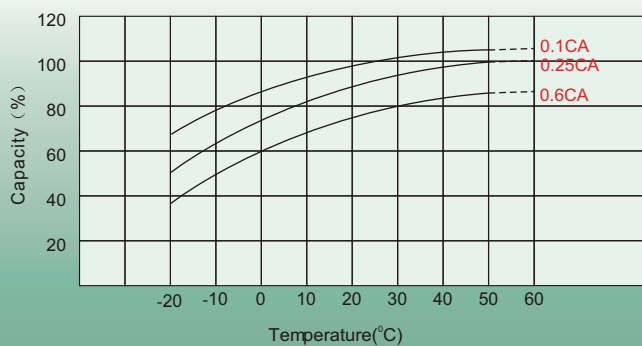
Discharge Characteristics



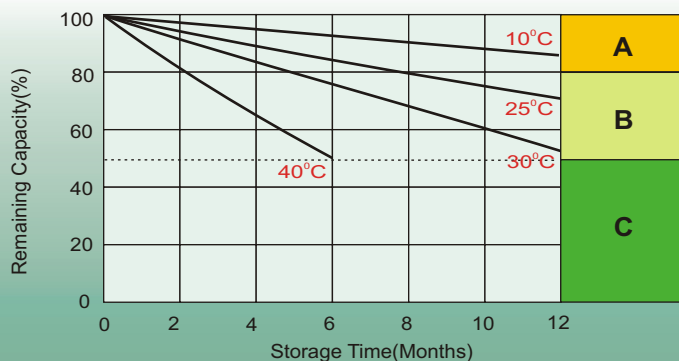
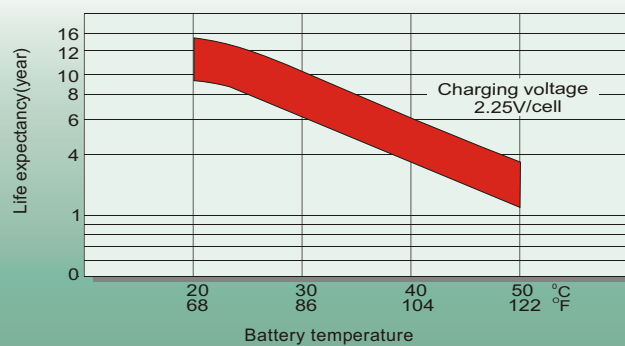
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way as below:

B

 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10 hours at limited current 0.05CA.

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

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