

# LPX SERIES-High Rate / UPS

## LPX12-250 (12V, 783.8 WPC, 252.8AH)

### Specification

Nominal Voltage	12V	
Watts/Cell(15min Rate)	783.3 Watts/Cell at 1.67V/cell	
Dimension	Length	522±3mm (20.55 inches)
	Width	268±3mm (10.55 inches)
	Container Height	220±3mm (8.66 inches)
	Total Height (with Terminal)	226±3mm (8.90 inches)
Approx Weight	Approx 73.0 kg (161.0 lbs)	
Terminal	T6	
Container Material	ABS to UL94-HB (Flame retardant UL94V-0 available)	
Rated Capacity	258.0 AH/25.8A	(10hr, 1.80V/cell, 25°C/77°F)
	252.8 AH/31.6A	(8hr, 1.75V/cell, 25°C/77°F)
	218.0 AH/43.6A	(5hr, 1.75V/cell, 25°C/77°F)
	198.0 AH/66.0A	(3hr, 1.75V/cell, 25°C/77°F)
	165.5 AH/165.5A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	2500A (5s)	
Internal Resistance	Approx 2.5mΩ	
Operating Temp. Range	Discharge : -20~60°C (-4~140°F)	
	Charge : 0~50°C (32~122°F)	
	Storage : -20~60°C (-4~140°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 75A. 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 LPX 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

- ◆ Uninterruptable Power Systems (UPS)
- ◆ High power backup supply
- ◆ Emergency power supply
- ◆ Critical DC Power Systems
- ◆ Critical Alarm Systems
- ◆ Security Surveillance Systems
- ◆ Emergency lighting
- ◆ Electric starting
- ◆ Railway signal back-up



### 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	363.0	335.0	288.0	222.5	168.3	137.0	83.4	60.8	48.1	40.2	35.7	29.9	25.0	12.9
1.80V/cell	409.5	374.0	317.3	237.5	180.7	147.8	88.9	64.6	50.7	42.5	37.7	31.3	25.8	13.4
1.75V/cell	444.0	392.7	330.8	246.5	186.7	153.5	91.1	66.0	52.3	43.6	38.4	31.6	26.1	13.5
1.70V/cell	469.5	419.2	348.0	253.0	192.3	158.0	92.8	67.6	53.4	44.4	39.1	31.8	26.5	13.6
1.67V/cell	\	442.1	360.8	262.5	197.0	162.0	94.6	68.4	54.3	45.2	39.7	32.2	26.7	13.7
1.60V/cell	\	461.0	371.3	267.5	200.3	165.5	96.3	69.8	55.4	45.8	40.1	32.5	26.9	13.8

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

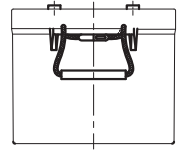
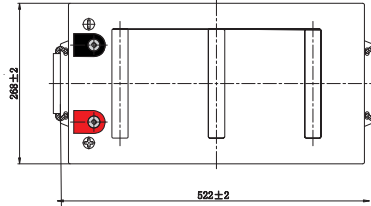
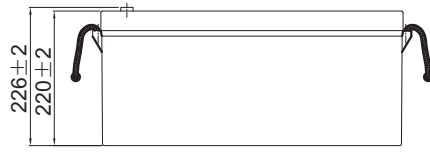
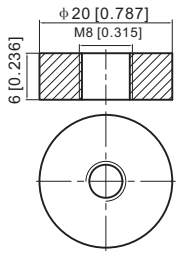
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	670.5	625.1	542.9	424.1	325.2	267.5	165.9	121.5	96.4	80.9	72.0	60.4	50.7	26.2
1.80V/cell	747.5	688.5	589.2	445.7	346.5	287.2	176.3	128.6	101.3	85.2	75.6	63.0	52.0	27.0
1.75V/cell	797.5	714.0	608.4	458.8	356.7	297.6	180.2	130.9	104.0	87.0	76.9	63.5	52.4	27.1
1.70V/cell	824.2	751.7	635.3	468.3	367.0	305.4	182.9	133.7	105.9	88.4	78.0	63.7	53.0	27.3
1.67V/cell	\	783.3	653.7	481.9	372.7	311.9	185.9	135.1	107.6	89.7	79.0	64.3	53.4	27.5
1.60V/cell	\	806.7	665.4	487.7	374.6	316.1	188.4	137.3	109.3	90.6	79.7	64.7	53.7	27.6



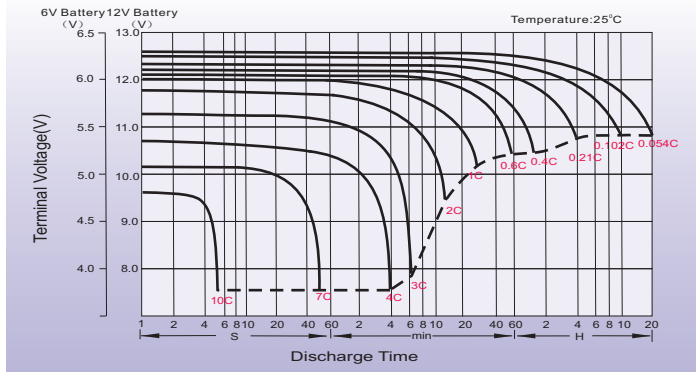
# Dimensions

## T11 Terminal

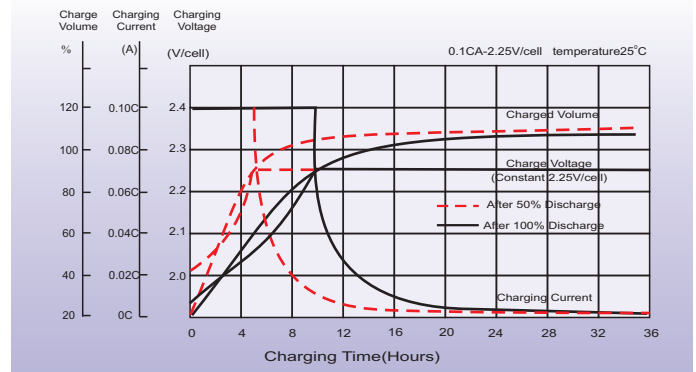
Unit: mm [inches]



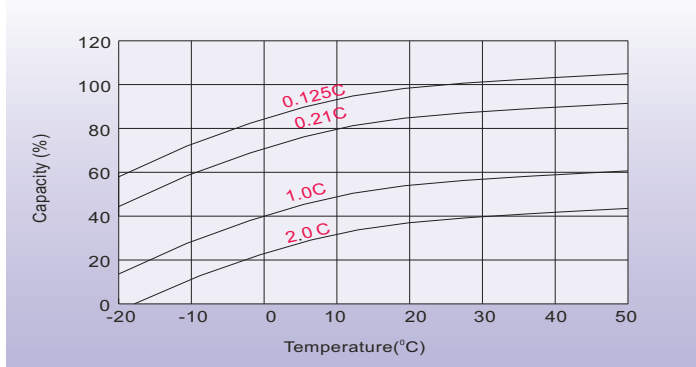
## Discharge Characteristics



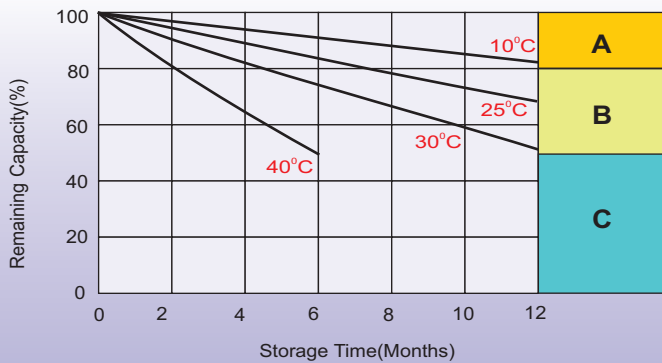
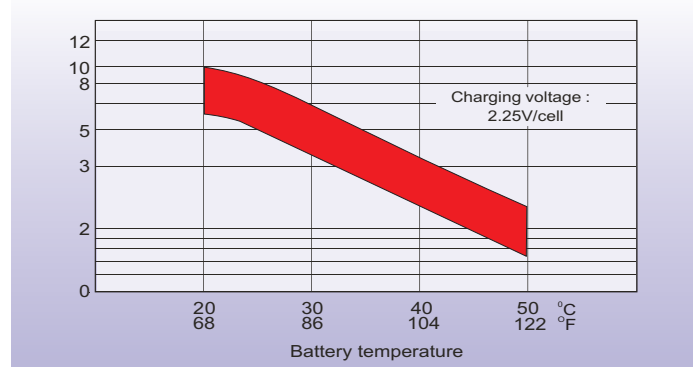
## Float Charging Characteristics



## 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.)
- B** Supplementary charge required before use. Optional charging way as below:
  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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