

# LPX SERIES-High Rate / UPS

## LPX12-150 (12V, 487.5 WPC, 152AH)



### Specification

Nominal Voltage	12V
Watts/Cell(15min Rate)	487.5 Watts/Cell at 1.67V/cell
Dimension	Length 483±3mm (19.02 inches)
	Width 170±2mm (6.69 inches)
	Container Height 238.5±3mm (9.39 inches)
	Total Height (with Terminal) 238.5±3mm (9.39 inches)
Approx Weight	Approx 43.5 kg (95.9 lbs)
Terminal	T11
Container Material	ABS to UL94-HB (Flame retardant UL94V-0 available)
Rated Capacity	155.0 AH/15.5A (10hr, 1.80V/cell, 25°C/77°F)
	152.0 AH/19.0A (8hr, 1.75V/cell, 25°C/77°F)
	131.0 AH/26.2A (5hr, 1.75V/cell, 25°C/77°F)
	117.3 AH/39.1A (3hr, 1.75V/cell, 25°C/77°F)
	100.4 AH/100.4A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1500A (5s)
Internal Resistance	Approx 3.5mΩ
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 45A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Standby Use	
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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	255.8	210.6	188.4	165.6	129.0	99.2	80.7	48.2	36.2	29.1	24.5	21.3	18.1	14.9	7.78
1.80V/cell	324.0	252.0	213.0	182.3	139.5	106.4	86.9	51.4	38.2	30.5	25.5	22.3	18.8	15.5	8.09
1.75V/cell	367.2	280.8	231.6	194.4	147.3	112.0	90.0	53.2	39.1	31.1	26.2	22.9	19.0	15.6	8.16
1.70V/cell	401.4	306.0	248.4	205.7	153.9	116.4	93.6	54.8	40.2	31.9	26.9	23.4	19.2	15.8	8.25
1.67V/cell	432.0	325.8	265.0	216.5	160.2	120.4	97.1	56.6	41.4	32.8	27.5	23.9	19.4	16.0	8.33
1.60V/cell	473.4	347.4	278.4	226.8	166.8	124.8	100.4	58.3	42.3	33.5	28.1	24.5	19.7	16.2	8.43

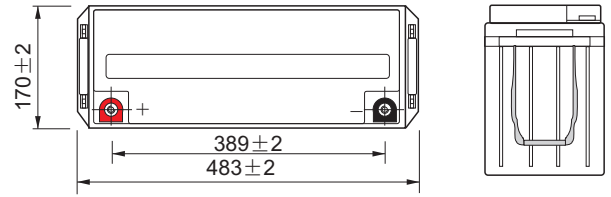
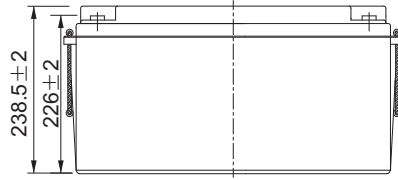
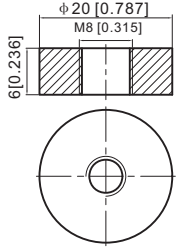
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	479.9	399.0	360.4	319.3	250.4	193.5	158.2	95.0	71.6	57.8	48.9	42.6	36.1	29.9	15.6
1.80V/cell	602.2	474.0	404.8	349.4	269.5	206.7	169.7	100.9	75.2	60.3	50.6	44.3	37.4	31.0	16.2
1.75V/cell	676.3	524.3	437.4	370.9	283.4	217.0	175.4	104.1	76.8	61.3	51.8	45.4	37.7	31.1	16.3
1.70V/cell	728.7	563.8	463.7	388.3	293.3	223.6	180.9	106.5	78.3	62.4	52.7	46.0	37.9	31.2	16.3
1.67V/cell	771.4	591.0	487.5	403.5	302.0	229.0	185.9	109.0	80.0	63.7	53.5	46.6	38.0	31.3	16.3
1.60V/cell	825.3	616.8	502.2	414.5	308.6	233.4	189.3	110.5	80.6	64.1	53.8	47.1	38.1	31.3	16.3

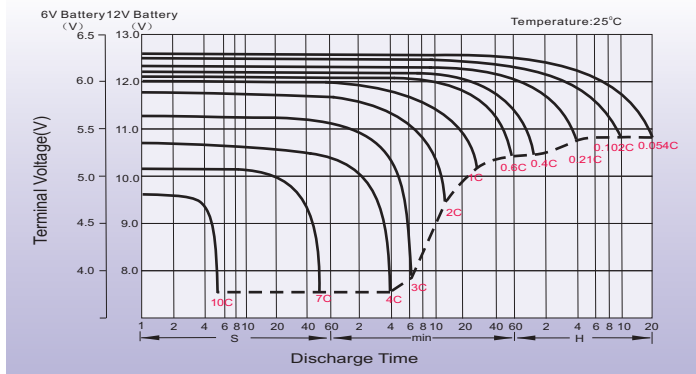
## Dimensions

### T11 Terminal

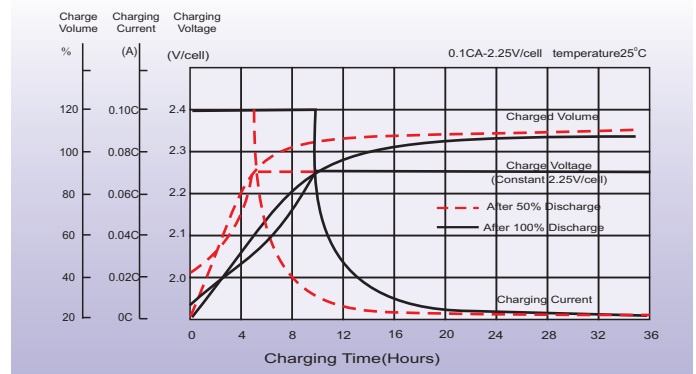
Unit: mm [inches]



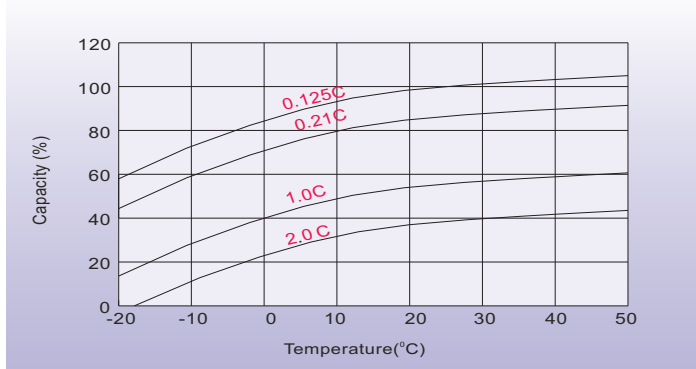
## Discharge Characteristics



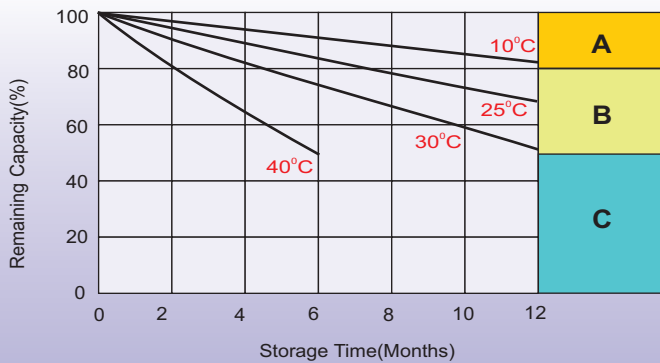
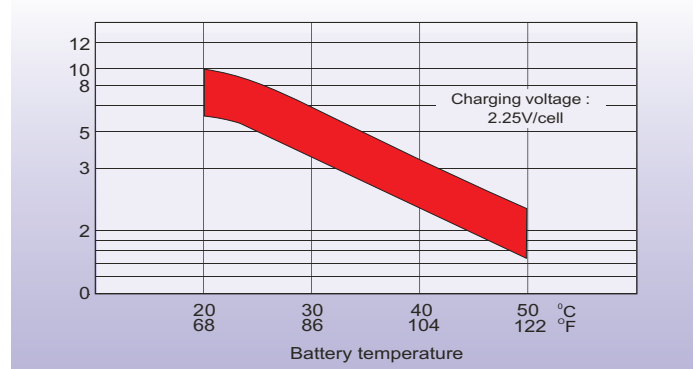
## Float Charging Characteristics



## 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 volatge 2.25V/cell.
  2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
  3. Charged for 8-10hours 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.

## Sales Office

### North America sales office:

Add: 19751 Descartes, Unit A,  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us  
Http://www.leoch.us

### Atlanta Office:

Add: 1900 The Exchange, Suite 640,  
Atlanta, GA 30339.  
Tel: 678-403-1083  
E-mail: sales@leoch.us

### China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com

### Europe sales office:

Add: 9B Wheatstone Court. Waterwells  
Business Park, Gloucester, GL2-2AQ,  
UK United Kingdom  
Tel: +44(0) 1452 729428 / 1452 729696  
Fax: +44 (0)1452-690125  
E-mail: Sales.Europe@leoch.com