

LPX SERIES-High Rate / UPS

LPX12-7.0 (12V, 29.0WPC, 7.18AH)

Specification

Nominal Voltage	12V
Watts/Cell(15min Rate)	29.0 Watts/Cell at 1.67V/cell
Dimension	Length 151 ± 1mm (5.95 inches)
	Width 65 ± 1mm (2.56 inches)
	Container Height 93.5 ± 1mm (3.68 inches)
	Total Height (with Terminal) 99 ± 1mm (3.90 inches)
Approx Weight	Approx 2.5 kg (5.51 lbs)
Terminal	T1 / T2
Container Material	ABS to UL94-HB (Flame retardant UL94V-0 available)
Rated Capacity	7.23 AH/0.723A (10hr, 1.80V/cell, 25°C/77°F)
	7.18 AH/0.897A (8hr, 1.75V/cell, 25°C/77°F)
	6.45 AH/1.290A (5hr, 1.75V/cell, 25°C/77°F)
	5.85 AH/1.950A (3hr, 1.75V/cell, 25°C/77°F)
	5.41 AH/5.410A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	105A (5s)
Internal Resistance	Approx 20mΩ
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 2.1A. 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	25.6	16.7	13.1	10.9	8.04	5.88	4.63	2.58	1.83	1.45	1.21	1.05	0.841	0.704	0.382
1.80V/cell	27.6	18.2	14.1	11.7	8.48	6.13	4.84	2.66	1.89	1.50	1.25	1.09	0.875	0.723	0.390
1.75V/cell	29.5	19.4	15.0	12.3	8.86	6.43	5.04	2.75	1.95	1.54	1.29	1.12	0.897	0.743	0.398
1.70V/cell	31.1	20.4	15.7	12.8	9.19	6.61	5.19	2.82	2.00	1.58	1.32	1.15	0.913	0.757	0.403
1.67V/cell	32.4	21.2	16.2	13.1	9.46	6.78	5.31	2.88	2.05	1.62	1.35	1.17	0.925	0.765	0.406
1.60V/cell	33.7	21.7	16.6	13.4	9.67	6.90	5.41	2.93	2.07	1.64	1.37	1.18	0.933	0.771	0.408

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

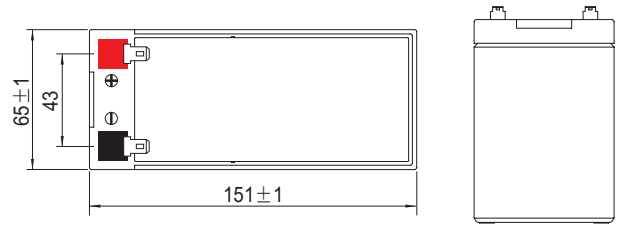
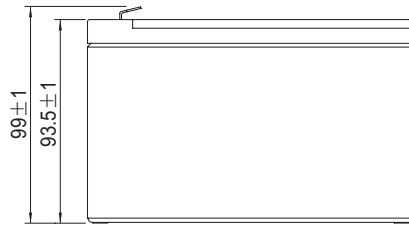
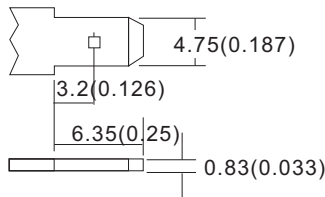
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	47.7	31.3	24.6	20.5	15.3	11.3	8.93	5.01	3.58	2.84	2.38	2.07	1.66	1.39	0.757
1.80V/cell	50.0	33.3	26.1	21.8	16.0	11.7	9.28	5.13	3.67	2.92	2.44	2.13	1.72	1.43	0.771
1.75V/cell	52.7	35.2	27.5	22.9	16.6	12.2	9.63	5.28	3.77	2.99	2.51	2.18	1.76	1.47	0.786
1.70V/cell	55.1	36.5	28.5	23.4	17.1	12.4	9.89	5.42	3.86	3.06	2.56	2.22	1.79	1.49	0.795
1.67V/cell	56.4	37.3	29.0	23.8	17.5	12.7	10.1	5.50	3.92	3.11	2.61	2.26	1.81	1.51	0.801
1.60V/cell	57.4	37.6	29.2	24.0	17.6	12.8	10.2	5.57	3.97	3.15	2.64	2.29	1.82	1.52	0.803



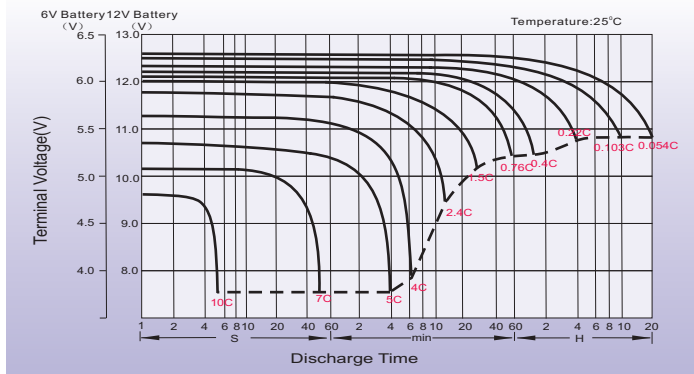
Dimensions

T1 Terminal

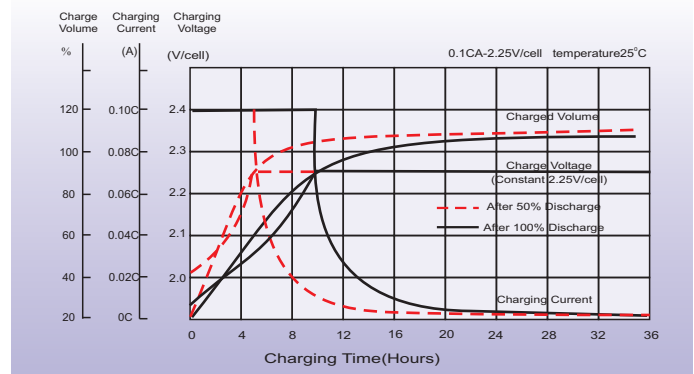
Unit: mm [inches]



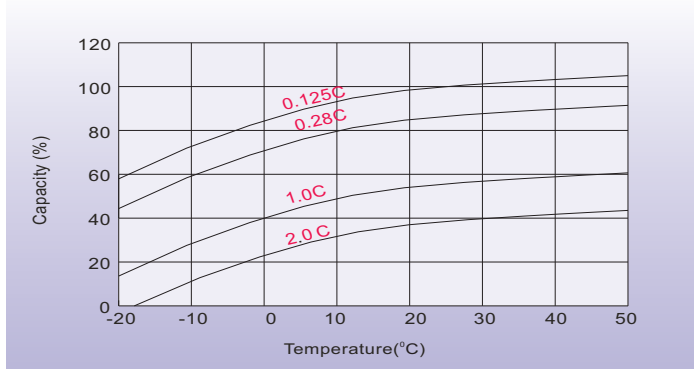
Discharge Characteristics



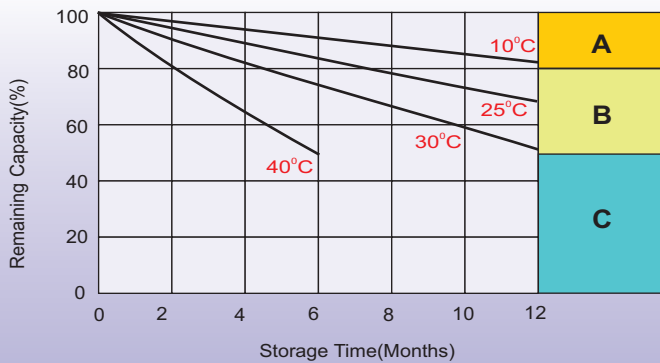
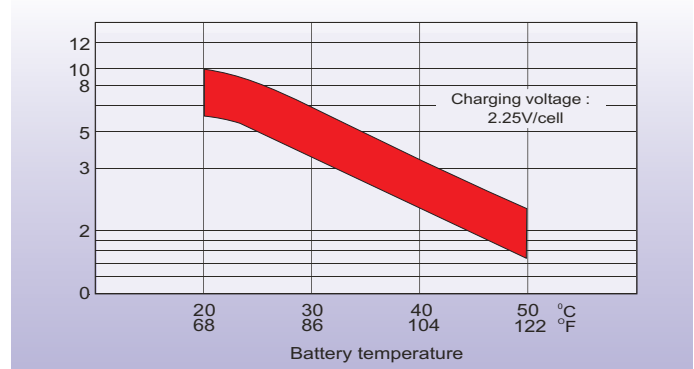
Float Charging Characteristics



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.

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