

LPX SERIES-High Rate / UPS

LPX12-7.6 (12V, 32.2 WPC, 7.82AH)

Specification

Nominal Voltage	12V
Watts/Cell(15min Rate)	32.2 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 2.45 kg (5.40 lbs)
Terminal	T1 / T2
Container Material	ABS to UL94-HB (Flame retardant UL94V-0 available)
Rated Capacity	7.88 AH/0.788A (10hr, 1.80V/cell, 25°C/77°F)
	7.82 AH/0.978A (8hr, 1.75V/cell, 25°C/77°F)
	7.05 AH/1.410A (5hr, 1.75V/cell, 25°C/77°F)
	6.39 AH/2.130A (3hr, 1.75V/cell, 25°C/77°F)
	5.89 AH/5.890A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	114A (5s)
Internal Resistance	Approx 18mΩ
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 2.3A. 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	28.2	18.4	14.7	12.2	9.14	6.63	5.18	2.81	2.00	1.58	1.32	1.15	0.917	0.767	0.416
1.80V/cell	31.7	20.1	15.8	13.0	9.56	6.86	5.37	2.90	2.07	1.63	1.36	1.18	0.950	0.788	0.425
1.75V/cell	34.3	21.4	16.6	13.7	9.95	7.12	5.55	2.99	2.13	1.69	1.41	1.22	0.978	0.810	0.434
1.70V/cell	36.3	22.4	17.4	14.2	10.3	7.34	5.69	3.08	2.19	1.73	1.45	1.25	0.995	0.825	0.439
1.67V/cell	37.6	23.3	18.0	14.6	10.6	7.51	5.79	3.14	2.23	1.76	1.47	1.27	1.008	0.833	0.442
1.60V/cell	38.7	23.8	18.4	15.0	10.8	7.63	5.89	3.18	2.26	1.79	1.49	1.29	1.017	0.840	0.445

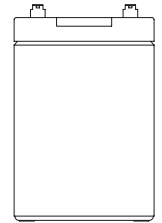
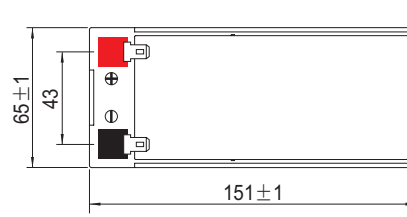
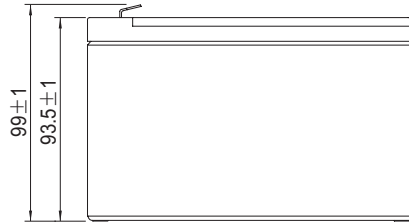
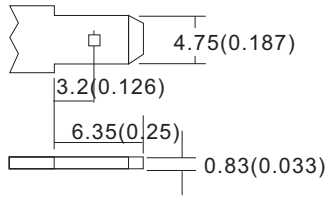
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	52.7	34.4	27.6	23.1	17.4	12.7	10.0	5.46	3.90	3.09	2.59	2.25	1.81	1.52	0.825
1.80V/cell	57.4	36.8	29.3	24.4	18.0	13.1	10.3	5.59	4.00	3.17	2.66	2.32	1.87	1.56	0.841
1.75V/cell	61.4	38.8	30.5	25.4	18.6	13.5	10.6	5.75	4.11	3.27	2.74	2.38	1.92	1.60	0.857
1.70V/cell	64.1	40.1	31.5	26.1	19.2	13.8	10.8	5.90	4.22	3.35	2.81	2.44	1.95	1.63	0.867
1.67V/cell	65.5	41.0	32.2	26.7	19.6	14.0	11.0	6.00	4.28	3.40	2.85	2.47	1.97	1.64	0.872
1.60V/cell	66.2	41.4	32.4	26.9	19.7	14.2	11.1	6.06	4.31	3.43	2.87	2.49	1.99	1.65	0.875

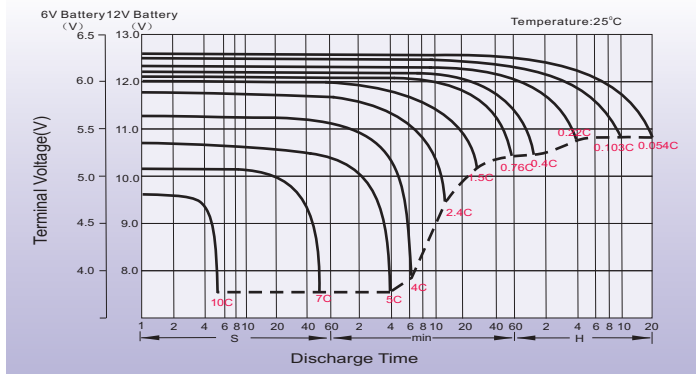
Dimensions

T1 Terminal

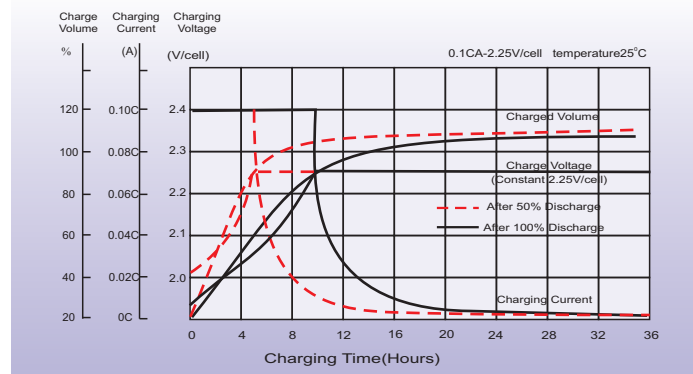
Unit: mm [inches]



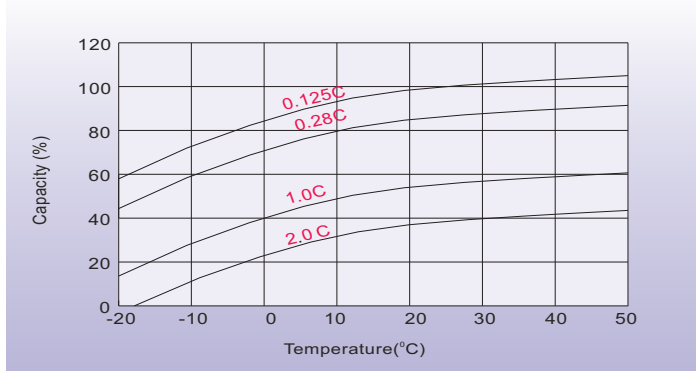
Discharge Characteristics



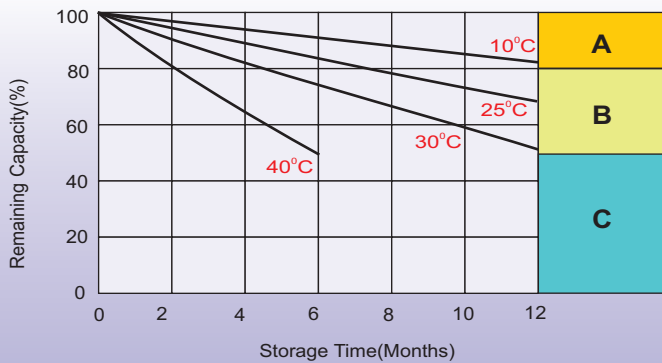
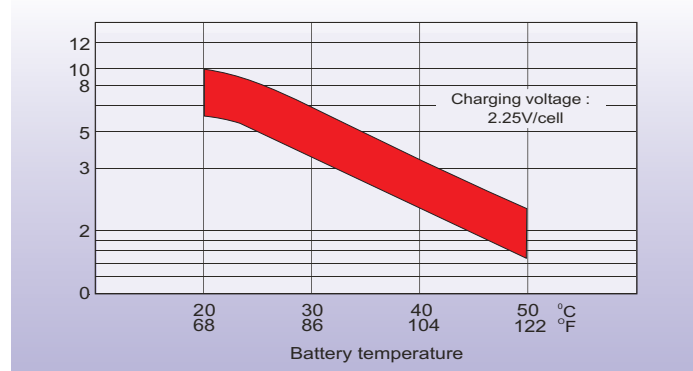
Float Charging Characteristics



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 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

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