

LPX SERIES-High Rate / UPS

LPX12-12 (12V, 49.8 WPC, 12.2AH)

Specification

Nominal Voltage	12V
Watts/Cell(15min Rate)	49.8 Watts/Cell at 1.67V/cell
Dimension	Length 151±2mm (5.95 inches)
	Width 98±1mm (3.86 inches)
	Container Height 95±1mm (3.74 inches)
	Total Height (with Terminal) 101±2mm (3.98 inches)
Approx Weight	Approx 4.05 kg (8.93 lbs)
Terminal	T1 / T2
Container Material	ABS to UL94-HB (Flame retardant UL94V-0 available)
Rated Capacity	12.6 AH/1.26A (10hr, 1.80V/cell, 25°C/77°F)
	12.2 AH/1.52A (8hr, 1.75V/cell, 25°C/77°F)
	10.5 AH/2.10A (5hr, 1.75V/cell, 25°C/77°F)
	9.45 AH/3.15A (3hr, 1.75V/cell, 25°C/77°F)
	8.77 AH/8.77A (1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	180A (5s)
Internal Resistance	Approx 14mΩ
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 3.6A. 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	26.0	24.2	20.6	17.1	12.5	8.95	7.11	4.00	2.87	2.29	1.97	1.68	1.41	1.19	0.678
1.80V/cell	30.4	27.4	22.5	18.3	13.5	9.70	7.59	4.26	3.03	2.40	2.02	1.77	1.50	1.26	0.684
1.75V/cell	34.2	30.1	24.6	19.8	14.0	10.1	7.94	4.43	3.15	2.50	2.10	1.81	1.52	1.28	0.690
1.70V/cell	37.7	32.7	26.3	20.8	14.6	10.5	8.19	4.61	3.27	2.58	2.14	1.85	1.54	1.29	0.703
1.67V/cell	41.6	35.3	27.9	22.0	15.3	10.8	8.47	4.73	3.38	2.66	2.19	1.89	1.57	1.32	0.713
1.60V/cell	46.0	37.6	29.4	23.5	16.2	11.3	8.77	4.90	3.48	2.74	2.25	1.94	1.58	1.33	0.716

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

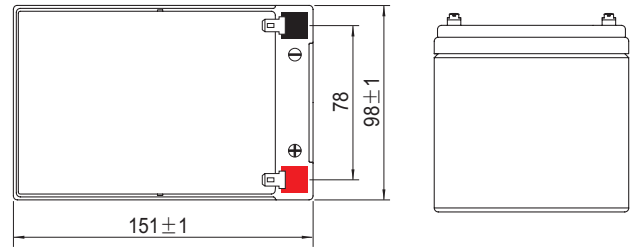
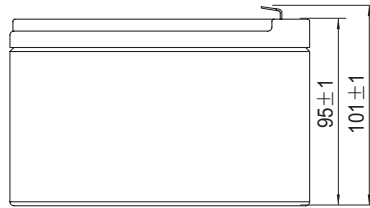
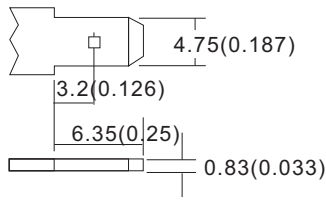
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	47.6	44.6	38.3	32.2	23.9	17.2	13.7	7.75	5.63	4.52	3.92	3.37	2.76	2.36	1.35
1.80V/cell	55.0	49.9	41.5	34.0	25.2	18.5	14.6	8.21	5.90	4.70	4.00	3.52	2.92	2.49	1.36
1.75V/cell	60.7	53.9	44.8	36.4	26.0	19.1	15.1	8.52	6.11	4.89	4.14	3.61	2.97	2.51	1.37
1.70V/cell	65.0	57.4	47.1	37.9	26.9	19.8	15.6	8.84	6.33	5.03	4.23	3.68	3.01	2.54	1.40
1.67V/cell	70.7	61.5	49.8	40.0	28.1	20.1	16.0	9.03	6.51	5.17	4.31	3.74	3.05	2.59	1.41
1.60V/cell	76.1	63.9	51.3	42.1	29.5	20.9	16.5	9.29	6.67	5.32	4.41	3.82	3.07	2.61	1.42



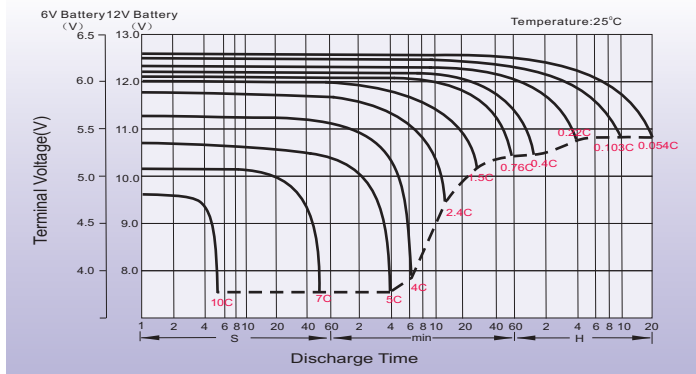
Dimensions

T1 Terminal

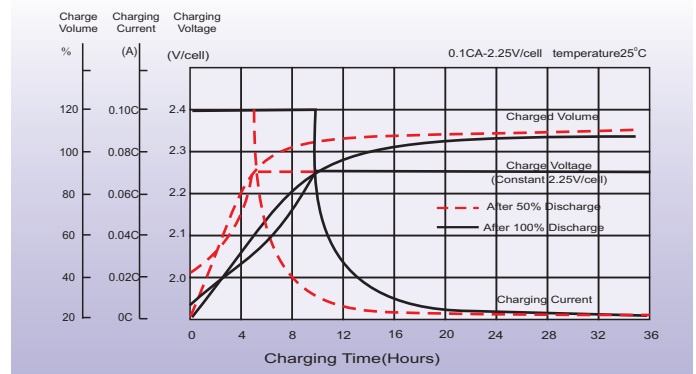
Unit: mm [inches]



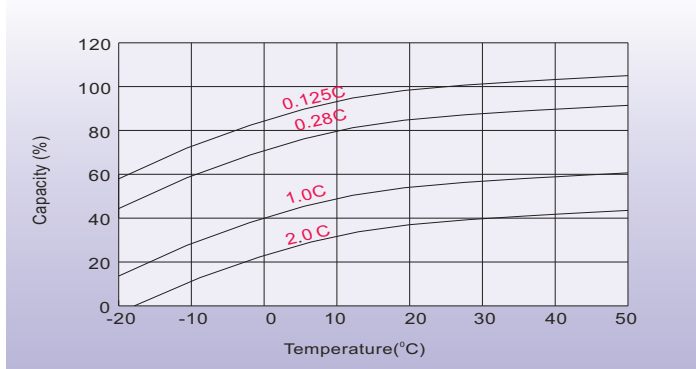
Discharge Characteristics



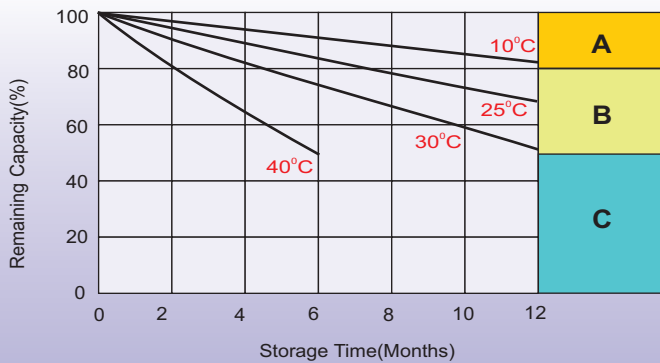
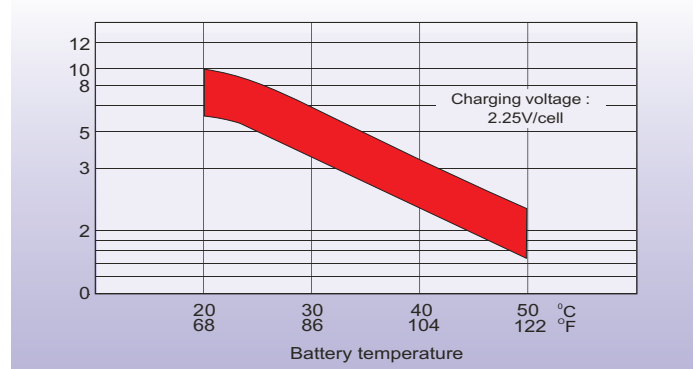
Float Charging Characteristics



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

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