



LANDPORT BV

LP SERIES-General Purpose

LP6-4.5S (6V4.5AH)

Specification

Nominal Voltage	6V	
Nominal Capacity(20HR)	4.5AH	
Dimensions	Length	67 ± 1mm (2.64 inches)
	Width	67 ± 1mm (2.64 inches)
	Container Height	96 ± 1mm (3.78 inches)
	Total Height (with Terminal)	109 ± 2mm (4.29 inches)
Approx Weight	Approx 0.78 kg (1.72lbs)	
Terminal	Spring Terminal	
Container Material	ABS	
Rated Capacity	4.50 AH/0.225A	(20hr, 1.80V/cell, 25°C/77°F)
	4.19 AH/0.419A	(10hr, 1.80V/cell, 25°C/77°F)
	3.78 AH/0.756A	(5hr, 1.75V/cell, 25°C/77°F)
	3.30 AH/1.10A	(3hr, 1.75V/cell, 25°C/77°F)
	2.73 AH/2.73A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	67.5A (5s)	
Internal Resistance	Approx 150mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-15 ~ 40°C (5 ~ 104°F)
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 1.35A. Voltage 7.2V~7.5V at 25°C(77°F)Temp. Coefficient -15mV/°C	
	Standby Use No limit on Initial Charging Current Voltage 6.75V~6.9V at 25°C(77°F)Temp. Coefficient -10mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LP 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

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



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	8.64	6.02	4.97	4.31	3.46	2.66	2.17	1.33	1.01	0.831	0.706	0.611	0.486	0.404	0.223
1.80V/cell	10.6	7.19	5.76	4.87	3.83	2.90	2.34	1.41	1.06	0.874	0.736	0.638	0.504	0.419	0.225
1.75V/cell	12.6	8.13	6.35	5.31	4.09	3.08	2.46	1.47	1.10	0.901	0.756	0.654	0.518	0.427	0.227
1.70V/cell	14.3	8.96	6.88	5.70	4.29	3.20	2.57	1.53	1.14	0.924	0.775	0.670	0.525	0.434	0.231
1.65V/cell	15.7	9.64	7.27	5.98	4.47	3.32	2.67	1.58	1.17	0.943	0.792	0.683	0.534	0.440	0.234
1.60V/cell	16.5	10.0	7.58	6.17	4.60	3.40	2.73	1.63	1.19	0.966	0.808	0.696	0.545	0.447	0.236

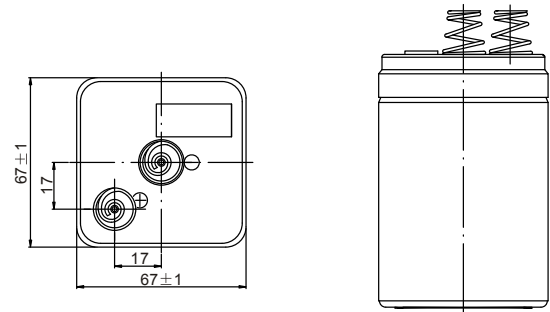
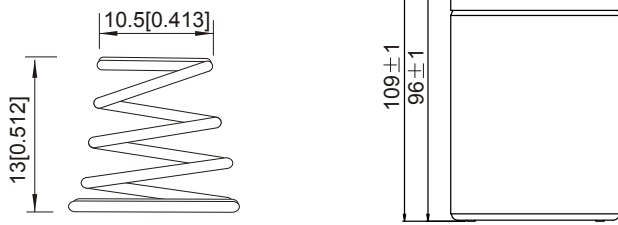
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.3	11.5	9.55	8.35	6.74	5.21	4.28	2.63	2.01	1.66	1.41	1.23	0.977	0.815	0.450
1.80V/cell	19.8	13.6	11.0	9.37	7.41	5.65	4.58	2.78	2.10	1.73	1.46	1.27	1.01	0.838	0.452
1.75V/cell	23.2	15.2	12.0	10.1	7.86	5.96	4.80	2.88	2.16	1.78	1.49	1.30	1.03	0.849	0.453
1.70V/cell	26.0	16.6	12.9	10.8	8.20	6.16	4.97	2.98	2.22	1.81	1.52	1.32	1.04	0.858	0.459
1.65V/cell	28.3	17.6	13.4	11.2	8.48	6.36	5.15	3.05	2.27	1.84	1.55	1.34	1.05	0.866	0.463
1.60V/cell	29.2	18.1	13.9	11.4	8.62	6.44	5.22	3.13	2.31	1.87	1.57	1.36	1.07	0.876	0.464

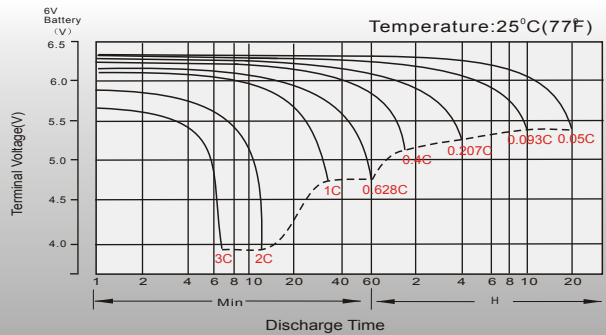
Dimensions

Spring Terminal

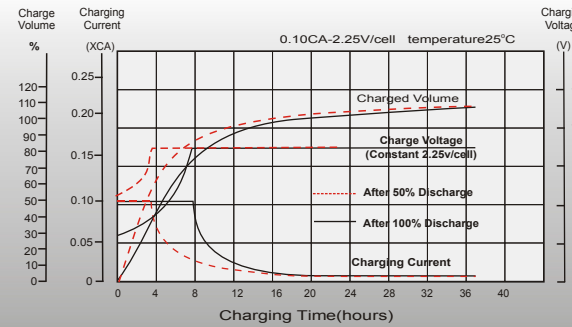
Unit: mm [inches]



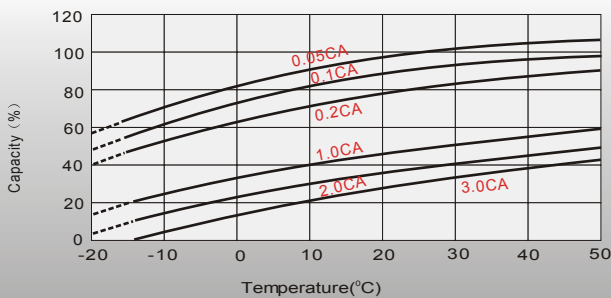
Discharge Characteristics



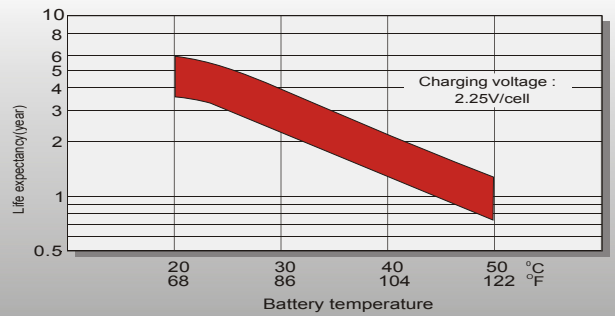
Float Charging Characteristics



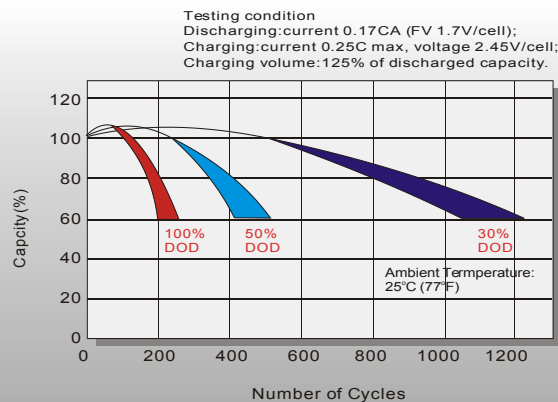
Temperature Effects in Relation to Battery Capacity



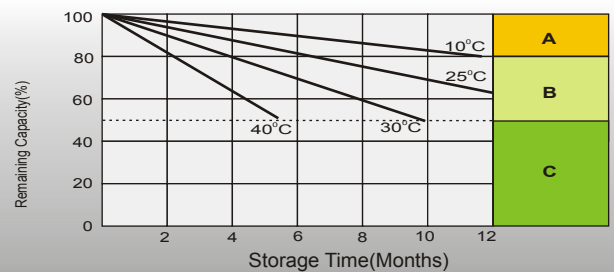
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** Nosup plemen tarycha rgereq uird (Carry utsupp lement rychag ebefore useif 100%cap acityis requie d)
- B** Supplen entaryc hargere quiredb eforeus e.Optb nalcha rgingw ayasb elow
1.Chag edfora bove3 daysat limited current 0.25CA andco nstantv olatge2.25V/c ll.
2.Chag edfora bove20 hoursa t limited current 0.25CA andco nstantv olatge2.45V/c ll.
3.Chag edfor8 ~10hursatlim tedcur ent0.05 CA.
- C** Supplen entaryc hargem ayofren failtor ecover thecap aciy. Thebat terysho uldnev erbe left standh gtilithi sisrea ched