



LP12-4.5 (12V 4.5Ah)

Specifications	
Rated Voltage	12
Nominal Capacity	4.5Ah (C ₂₀ , 1.75V/cell)
Dimensions	Length 90 mm
	Width 70 mm
	Container Height 101 mm
	Total Height 107 mm
Approx. Weight	1.39 Kg (3.06 lbs)
Terminal	T1
Layout	1
Container material	ABS
Rated Capacity (25°C)	4.50 Ah (20hr, 0.225A, 1.75V/cell)
	4.19 Ah (10hr, 0.419A, 1.75V/cell)
	3.83 Ah (5hr, 0.765A, 1.75V/cell)
	3.39 Ah (3hr, 1.13A, 1.75V/cell)
	2.66 Ah (1hr, 2.66A, 1.60V/cell)
Max. Discharge Current	75A (5s)
Internal Resistance (25°C)	Approx 48mΩ
	Discharge: -15°C ~50°C (5~122°F)
Operating Temp. Range	Charge: 0°C ~40°C (32~104°F)
	Storage: -15°C ~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 14.4V~15.0V at 25°C (77 °F)Temp. Coefficient -30mV/°C
Standby Use	Initial Charging Current less than 1.35A. Voltage 13.5V~13.8V at 25°C (77 °F)Temp. Coefficient -20mV/°C
	40°C (104°F) 103%
Effect Of Temp. To Capacity	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.



Description and Features

The LP Series AGM batteries have been specially developed to be widely applicable. These lead acid batteries with AGM technology are completely sealed and therefore 100% maintenance free and leak-proof. These batteries have a low self-discharge. The reliable and safe multipurpose batteries from the LP Series offer a long service life and can be used in various industries.

Features

- Absorbent Glass Mat technology
- Reliable and safe performance
- Long service life - 3-5 years in standby application (at 25°C)
- Suitable for multipurpose applications

Layout	Terminal	UL certification

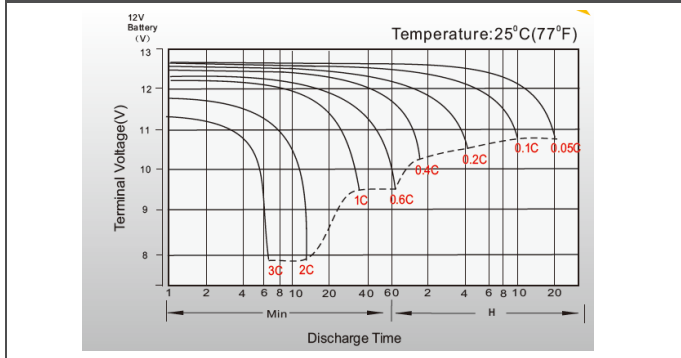
Constant Current Discharge Characteristics: A (25°C)																
F.V/Time	5 Min	10 Min	15 Min	20 Min	30 Min	45 Min	1Hr	1.5 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	20 Hr
1.85V/cell	11.3	8.26	6.55	5.35	4.07	2.99	2.44	1.84	1.53	1.09	0.876	0.744	0.637	0.500	0.409	0.220
1.80V/cell	12.2	8.69	6.81	5.51	4.17	3.04	2.48	1.87	1.56	1.11	0.888	0.755	0.645	0.507	0.413	0.222
1.75V/cell	13.1	9.10	7.06	5.68	4.27	3.11	2.53	1.90	1.58	1.13	0.900	0.765	0.653	0.513	0.419	0.225
1.70V/cell	14.1	9.50	7.31	5.84	4.37	3.16	2.57	1.94	1.61	1.14	0.910	0.775	0.662	0.519	0.424	0.227
1.67V/cell	14.8	9.80	7.46	5.95	4.43	3.20	2.60	1.95	1.62	1.15	0.920	0.780	0.667	0.523	0.427	0.229
1.60V/cell	16.0	10.40	7.80	6.17	4.56	3.29	2.66	2.00	1.66	1.17	0.940	0.795	0.679	0.532	0.433	0.231

Constant Power Discharge Characteristics: Wpc (25°C)																
F.V/Time	5 Min	10 Min	15 Min	20 Min	30 Min	45 Min	1Hr	1.5 Hr	2 Hr	3 Hr	4 Hr	5 Hr	6 Hr	8 Hr	10 Hr	20 Hr
1.85V/cell	21.3	15.8	12.6	10.3	7.86	5.79	4.74	3.59	3.01	2.15	1.73	1.47	1.26	0.990	0.812	0.489
1.80V/cell	23.0	16.5	13.1	10.5	8.02	5.89	4.82	3.65	3.04	2.18	1.75	1.49	1.28	1.01	0.821	0.494
1.75V/cell	24.7	17.2	13.4	10.8	8.18	5.98	4.89	3.69	3.09	2.21	1.76	1.50	1.29	1.02	0.831	0.499
1.70V/cell	26.4	17.9	13.9	11.1	8.33	6.07	4.96	3.74	3.12	2.23	1.79	1.52	1.31	1.03	0.840	0.504
1.67V/cell	27.4	18.4	14.0	11.3	8.42	6.13	5.00	3.77	3.15	2.25	1.80	1.53	1.31	1.04	0.845	0.507
1.60V/cell	29.5	19.3	14.6	11.6	8.63	6.26	5.09	3.83	3.20	2.29	1.83	1.56	1.33	1.05	0.858	0.515

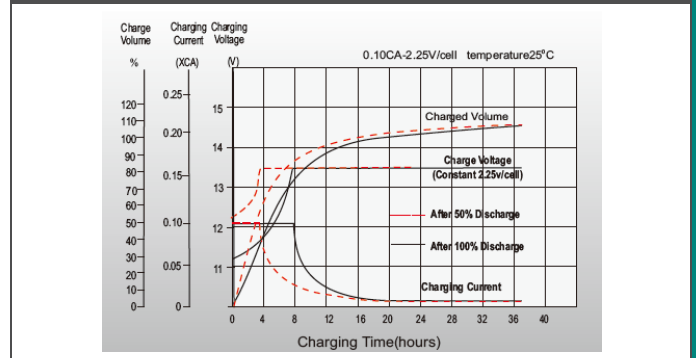


LP12-4.5 (12V 4.5Ah)

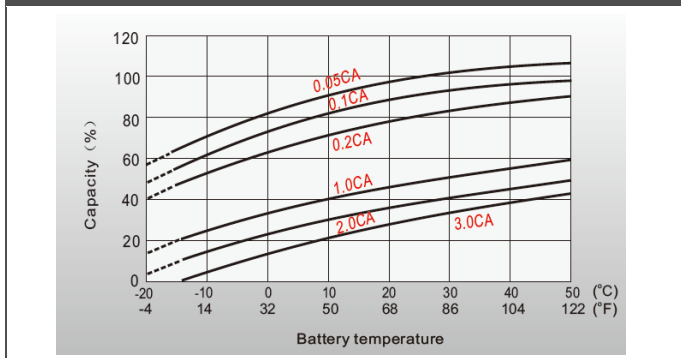
Discharge Characteristics



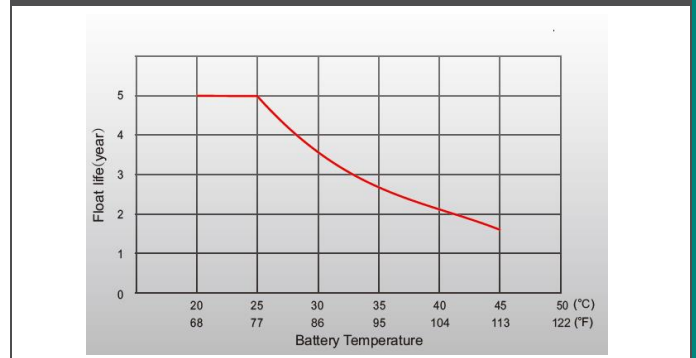
Float Charging Characteristics



Temperature Effects In Relation To Battery Capacity



Float Service Life



Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

General Features

- 5 years design life(25°C)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- UKCA Certified (for UK)
- IATF16949, ISO45001,ISO 9001 and ISO 14001 certified production facilities

(Note) All above information shall be changed without prior notice, Landport Batteries reserves the right to explain and update the latest information.