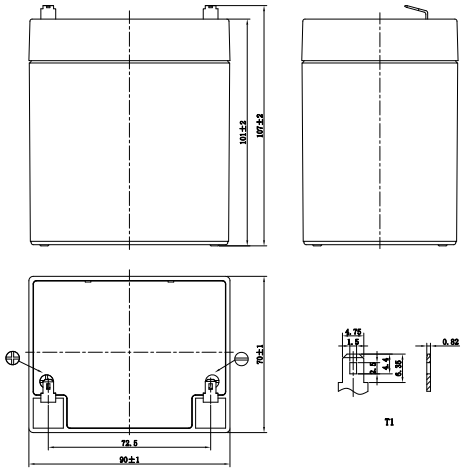
LP SERIES-GENERAL PURPOSE

LP12-5.0 (12V5.0Ah)





CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	C_{20},1.75V/cell	5.0Ah
Dimension	Length	90mm (3.54inches)
	Width	70mm (2.76inches)
	Container Height	101mm (3.98inches)
	Total Height	107mm (4.21inches)
Approx Weight		1.55kg (3.42lbs)
Terminal		T1/T2
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		140A
Internal Resistance (25˚C)		Approx 34 mΩ (Fully charged)
Operating Temp. Range	Discharge	-15~50˚C (5~122°F)
	Charge	-20~40˚C (-4~104°F)
	Storage	-15~40˚C (5~104°F)
Nominal Operating Temp. Range		25±3˚C (77±5°F)
Max.Charging Current (25˚C)		0.3C
Charge voltage (25˚C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coeffcient	-3mV/cell/˚C	-5mV/cell/˚C
Effect of temp. to Capacity	40˚C (104°F)	103%
	25˚C (77°F)	100%
	0˚C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F). LP series batteries may be stored 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.	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.1	11.0	8.69	7.02	5.09	3.69	2.97	2.18	1.71	1.24	0.984	0.838	0.717	0.565	0.462	0.244
1.80V/cell	17.4	11.6	9.12	7.30	5.24	3.79	3.05	2.22	1.74	1.26	1.00	0.850	0.729	0.573	0.468	0.247
1.75V/cell	18.3	12.1	9.42	7.50	5.38	3.87	3.11	2.26	1.77	1.28	1.01	0.861	0.737	0.579	0.473	0.250
1.70V/cell	19.2	12.6	9.74	7.72	5.52	3.96	3.17	2.30	1.80	1.29	1.03	0.872	0.746	0.585	0.478	0.252
1.67V/cell	19.8	12.9	9.98	7.88	5.61	4.02	3.21	2.33	1.82	1.31	1.04	0.880	0.752	0.590	0.481	0.254
1.60V/cell	21.0	13.5	10.3	8.11	5.77	4.12	3.29	2.38	1.86	1.33	1.05	0.894	0.763	0.598	0.487	0.257
Constant Power Discharge (Watts/cell) at 25°C (77°F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	30.5	20.9	16.6	13.5	9.83	7.16	5.78	4.25	3.35	2.43	1.94	1.65	1.42	1.12	0.918	0.489
1.80V/cell	32.6	22.0	17.4	14.0	10.1	7.32	5.91	4.33	3.41	2.46	1.96	1.68	1.44	1.14	0.930	0.495
1.75V/cell	34.1	22.8	17.9	14.3	10.3	7.45	6.00	4.40	3.46	2.50	1.99	1.69	1.45	1.15	0.938	0.500
1.70V/cell	35.5	23.5	18.3	14.6	10.5	7.59	6.10	4.46	3.50	2.53	2.01	1.72	1.47	1.16	0.947	0.504
1.67V/cell	36.5	24.1	18.7	14.9	10.7	7.69	6.18	4.51	3.53	2.55	2.03	1.73	1.48	1.17	0.954	0.508
1.60V/cell	38.5	25.0	19.3	15.3	10.9	7.83	6.29	4.58	3.59	2.59	2.06	1.75	1.50	1.18	0.965	0.514

LP SERIES-GENERAL PURPOSE

LP12-5.0 (12V5.0Ah)

APPLICATIONS

- 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

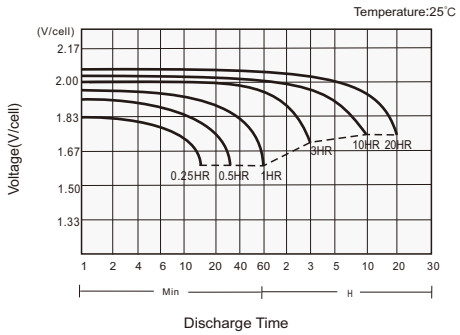
GENERAL FEATURES

- 5 years design life (25℃)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

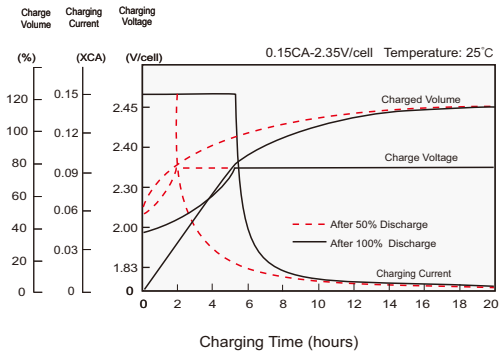
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL,CE Approved

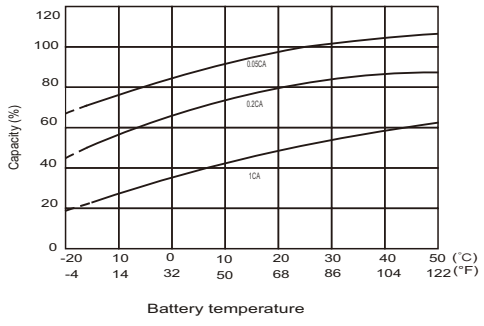
Discharge Characteristics



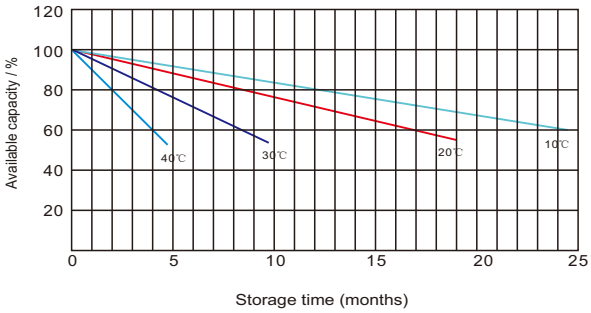
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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