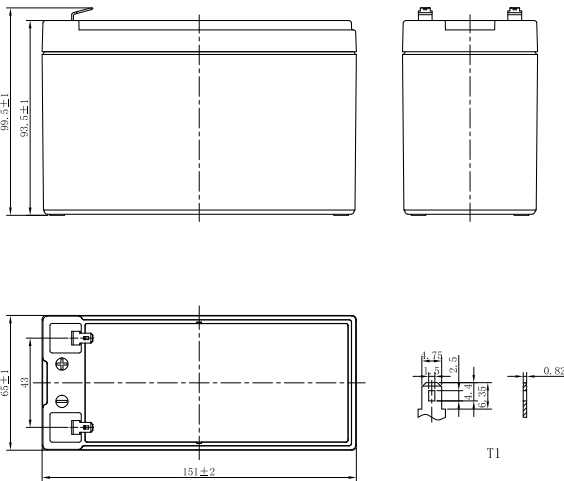


LP SERIES-GENERAL PURPOSE

LP12-8.5 (12V8.5Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₂₀ , 1.75V/cell	8.5Ah
Dimension	Length	151mm (5.94inches)
	Width	65mm (2.56inches)
	Container Height	93.5mm (3.68inches)
	Total Height	99.5mm (3.92inches)
Approx Weight	2.45kg (5.40lbs)	
Terminal	T1/T2	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	238A	
Internal Resistance (25°C)	Approx 18 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. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
	≤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.	
Self Discharge		

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	18.6	13.2	11.1	9.42	7.04	5.23	4.22	3.33	2.52	1.87	1.52	1.29	1.12	0.884	0.730	0.403
1.80V/cell	22.2	15.2	12.4	10.4	7.70	5.63	4.54	3.63	2.69	1.99	1.60	1.36	1.17	0.932	0.769	0.412
1.75V/cell	24.8	16.5	13.4	11.0	8.03	5.84	4.70	3.79	2.76	2.04	1.63	1.39	1.19	0.949	0.782	0.425
1.70V/cell	27.1	17.9	14.1	11.5	8.33	6.04	4.84	3.94	2.84	2.08	1.67	1.41	1.21	0.962	0.792	0.426
1.67V/cell	29.4	18.8	14.6	11.9	8.61	6.23	4.99	4.03	2.89	2.13	1.69	1.44	1.23	0.973	0.800	0.430
1.60V/cell	31.0	19.6	15.1	12.2	8.85	6.38	5.10	4.14	2.96	2.16	1.73	1.46	1.25	0.983	0.807	0.433
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	35.1	25.1	21.3	18.2	13.8	10.3	8.32	6.59	4.97	3.72	3.02	2.59	2.25	1.78	1.47	0.814
1.80V/cell	41.4	28.7	23.7	20.0	15.0	11.0	8.91	7.12	5.31	3.94	3.19	2.72	2.36	1.87	1.54	0.829
1.75V/cell	46.0	31.1	25.4	21.1	15.5	11.4	9.23	7.35	5.44	4.01	3.23	2.75	2.38	1.89	1.56	0.843
1.70V/cell	49.3	33.1	26.3	21.8	16.0	11.7	9.40	7.58	5.54	4.09	3.27	2.77	2.41	1.90	1.57	0.846
1.67V/cell	52.7	34.4	27.0	22.2	16.3	11.9	9.60	7.71	5.60	4.14	3.30	2.80	2.42	1.91	1.58	0.848
1.60V/cell	54.3	34.9	27.5	22.4	16.5	12.1	9.70	7.80	5.68	4.17	3.34	2.83	2.44	1.92	1.59	0.850

LP SERIES-GENERAL PURPOSE

LP12-8.5 (12V8.5Ah)



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

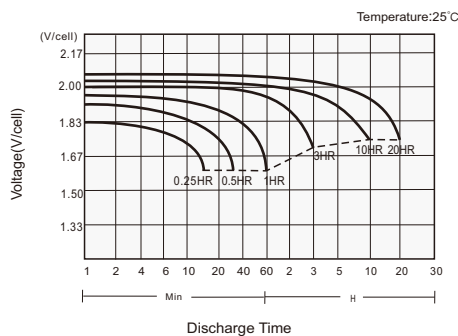
GENERAL FEATURES

- 5 years design life (25°C)
- 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

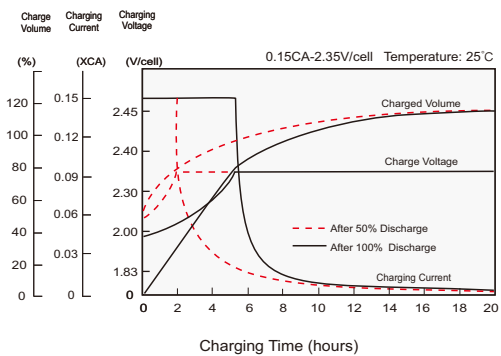
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Approved
- Manufactured in Leoch@IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

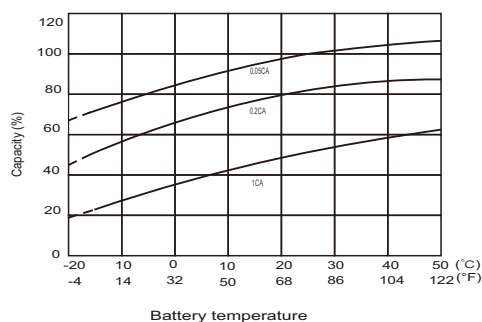
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

