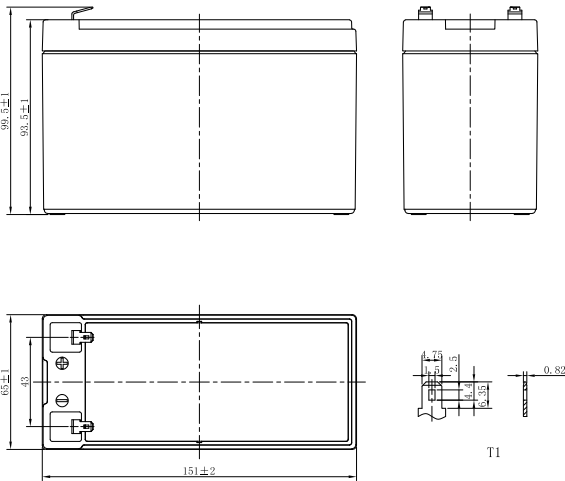


# LP SERIES-GENERAL PURPOSE

## LP12-9.0 (12V9.0Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>20</sub> , 1.75V/cell	9.0Ah
Dimension	Length	151mm (5.94inches)
	Width	65mm (2.56inches)
	Container Height	93.5mm (3.68inches)
	Total Height	99.5mm (3.92inches)
Approx Weight	2.52kg (5.56lbs)	
Terminal	T1/T2	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	252A	
Internal Resistance (25°C)	Approx 17 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	30.2	20.7	16.1	12.9	9.34	6.72	5.41	3.92	3.08	2.22	1.77	1.51	1.29	1.02	0.832	0.440
1.80V/cell	32.4	21.9	16.9	13.4	9.63	6.90	5.54	4.00	3.14	2.26	1.80	1.53	1.31	1.03	0.843	0.445
1.75V/cell	34.2	22.8	17.4	13.8	9.88	7.05	5.66	4.08	3.19	2.30	1.82	1.55	1.33	1.04	0.851	0.450
1.70V/cell	35.8	23.7	18.0	14.2	10.1	7.21	5.76	4.15	3.24	2.33	1.85	1.57	1.34	1.05	0.860	0.454
1.67V/cell	37.0	24.4	18.5	14.5	10.3	7.32	5.85	4.20	3.28	2.35	1.86	1.58	1.35	1.06	0.866	0.457
1.60V/cell	39.3	25.4	19.1	14.9	10.6	7.50	5.98	4.29	3.34	2.40	1.90	1.61	1.37	1.08	0.877	0.462
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	57.1	39.4	30.8	24.8	18.1	13.0	10.5	7.66	6.03	4.37	3.49	2.98	2.55	2.02	1.65	0.880
1.80V/cell	60.8	41.4	32.1	25.7	18.5	13.3	10.8	7.79	6.13	4.43	3.53	3.02	2.59	2.04	1.67	0.890
1.75V/cell	63.3	42.8	33.0	26.2	18.9	13.6	10.9	7.91	6.22	4.49	3.58	3.05	2.62	2.06	1.69	0.900
1.70V/cell	65.7	44.2	33.9	26.9	19.3	13.8	11.1	8.03	6.30	4.55	3.62	3.09	2.64	2.08	1.71	0.907
1.67V/cell	67.4	45.2	34.6	27.4	19.6	14.0	11.2	8.11	6.36	4.59	3.65	3.11	2.67	2.10	1.72	0.914
1.60V/cell	70.1	46.5	35.6	28.0	20.0	14.3	11.4	8.30	6.46	4.66	3.71	3.15	2.70	2.13	1.74	0.924

# LP SERIES-GENERAL PURPOSE

## LP12-9.0 (12V9.0Ah)



### 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

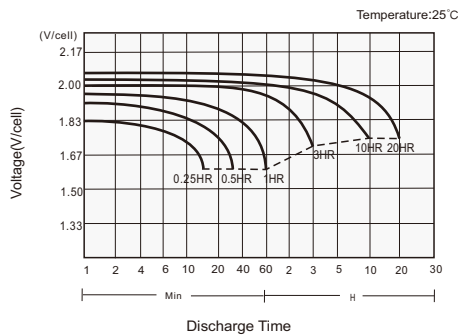
### GENERAL FEATURES

- 5 years design life (25°C)
- 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

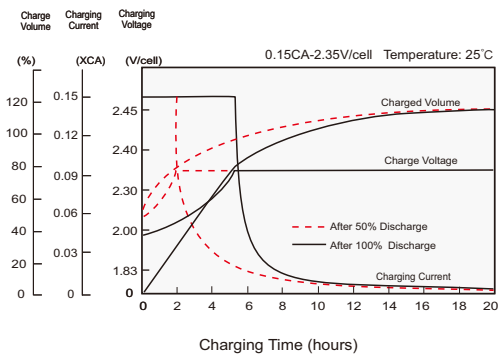
### STANDARDS

- 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

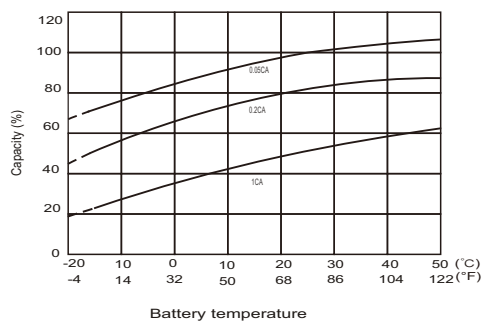
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

