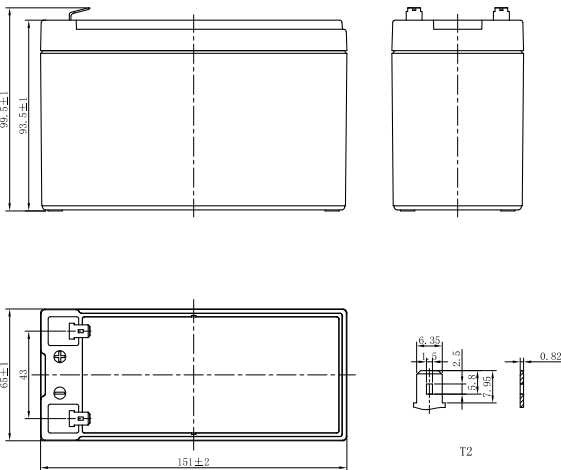


# LP SERIES-GENERAL PURPOSE

## LP12-7.0 (12V7Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>20</sub> , 1.75V/cell 7Ah	
Dimension	Length	151mm (5.94inches)
	Width	65mm (2.56inches)
	Container Height	93.5mm (3.68inches)
	Total Height	99.5mm (3.92inches)
Approx Weight	2.2kg (4.85lbs)	
Terminal	T1/T2	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	196A	
Internal Resistance (25°C)	Approx 25 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	
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	23.6	15.1	11.5	9.38	6.90	5.05	4.16	3.05	2.40	1.73	1.38	1.17	1.00	0.790	0.647	0.342
1.80V/cell	25.4	16.1	12.1	9.75	7.12	5.18	4.26	3.11	2.44	1.76	1.40	1.19	1.02	0.800	0.656	0.346
1.75V/cell	26.8	16.7	12.5	10.0	7.30	5.29	4.35	3.17	2.48	1.79	1.42	1.20	1.03	0.810	0.662	0.350
1.70V/cell	28.0	17.4	12.9	10.3	7.49	5.41	4.43	3.22	2.52	1.81	1.44	1.22	1.04	0.820	0.669	0.353
1.67V/cell	29.0	17.9	13.2	10.5	7.62	5.50	4.50	3.27	2.55	1.83	1.45	1.23	1.05	0.830	0.674	0.356
1.60V/cell	30.8	18.6	13.7	10.8	7.83	5.64	4.60	3.34	2.60	1.86	1.48	1.25	1.07	0.840	0.682	0.359
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	44.7	28.8	22.1	18.1	13.4	9.79	8.10	5.96	4.69	3.40	2.72	2.32	1.99	1.57	1.29	0.684
1.80V/cell	47.6	30.3	23.0	18.7	13.7	10.0	8.27	6.06	4.77	3.45	2.75	2.35	2.02	1.59	1.30	0.692
1.75V/cell	49.6	31.3	23.7	19.1	14.0	10.2	8.41	6.15	4.84	3.49	2.78	2.37	2.04	1.61	1.31	0.700
1.70V/cell	51.5	32.4	24.3	19.6	14.3	10.4	8.53	6.24	4.90	3.54	2.82	2.40	2.06	1.62	1.33	0.706
1.67V/cell	52.8	33.1	24.8	19.9	14.5	10.5	8.65	6.31	4.94	3.57	2.84	2.42	2.07	1.63	1.34	0.711
1.60V/cell	54.9	34.0	25.5	20.4	14.8	10.7	8.80	6.42	5.03	3.62	2.88	2.45	2.10	1.65	1.35	0.719

# LP SERIES-GENERAL PURPOSE

## LP12-7.0 (12V7Ah)



### 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

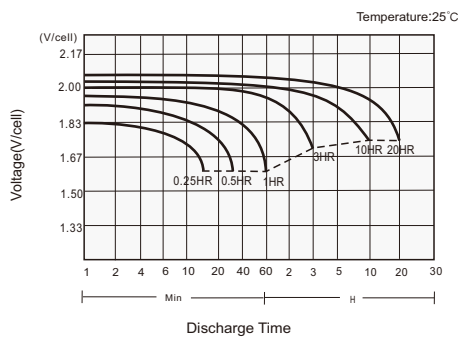
### GENERAL FEATURES

- 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

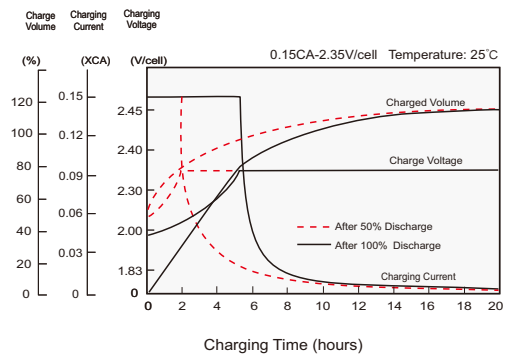
### STANDARDS

- 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

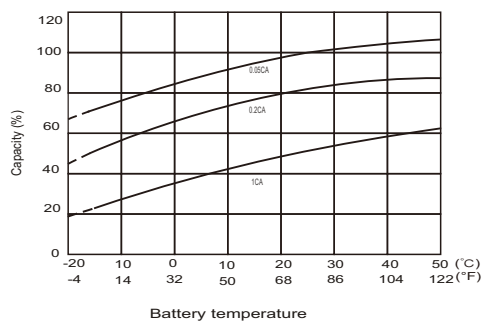
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

