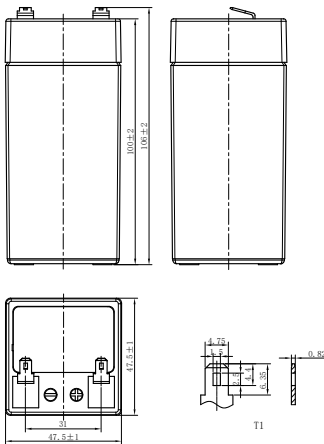


# LP SERIES-GENERAL PURPOSE

## LP4-4.0 (4V4.0Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	4V	
Nominal Capacity (25°C)	C <sub>20</sub> , 1.75V/cell	4.0Ah
Dimension	Length	47.5mm (1.87inches)
	Width	47.5mm (1.87inches)
	Container Height	100mm (3.94inches)
	Total Height	106mm (4.17inches)
Approx Weight	0.48kg (1.06lbs)	
Terminal	T1	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	112A	
Internal Resistance (25°C)	Approx 19 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	12.3	8.42	6.55	5.33	3.92	2.87	2.35	1.72	1.37	0.990	0.790	0.670	0.570	0.450	0.370	0.196
1.80V/cell	13.2	8.93	6.88	5.54	4.05	2.95	2.41	1.76	1.39	1.00	0.800	0.680	0.580	0.460	0.375	0.198
1.75V/cell	13.9	9.29	7.10	5.70	4.15	3.01	2.46	1.79	1.42	1.02	0.810	0.690	0.590	0.460	0.378	0.200
1.70V/cell	14.6	9.70	7.34	5.86	4.26	3.08	2.50	1.82	1.44	1.04	0.820	0.700	0.600	0.470	0.382	0.202
1.67V/cell	15.1	9.90	7.52	5.98	4.33	3.13	2.54	1.84	1.46	1.05	0.830	0.700	0.600	0.470	0.385	0.203
1.60V/cell	16.0	10.4	7.78	6.16	4.45	3.20	2.60	1.88	1.49	1.06	0.840	0.720	0.610	0.480	0.390	0.205
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	23.2	16.0	12.6	10.3	7.59	5.56	4.57	3.36	2.68	1.94	1.55	1.32	1.14	0.900	0.734	0.391
1.80V/cell	24.8	16.9	13.1	10.6	7.78	5.69	4.67	3.42	2.72	1.97	1.57	1.34	1.15	0.910	0.744	0.396
1.75V/cell	25.8	17.4	13.4	10.9	7.95	5.79	4.74	3.47	2.77	2.00	1.59	1.36	1.16	0.920	0.751	0.400
1.70V/cell	26.8	18.0	13.8	11.1	8.12	5.90	4.82	3.52	2.80	2.02	1.61	1.37	1.18	0.930	0.758	0.403
1.67V/cell	27.4	18.4	14.1	11.3	8.24	5.98	4.88	3.56	2.83	2.04	1.62	1.38	1.19	0.930	0.763	0.406
1.60V/cell	28.6	18.9	14.5	11.6	8.42	6.09	4.97	3.62	2.87	2.07	1.65	1.40	1.20	0.950	0.772	0.411

# LP SERIES-GENERAL PURPOSE

## LP4-4.0 (4V4.0Ah)



### 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

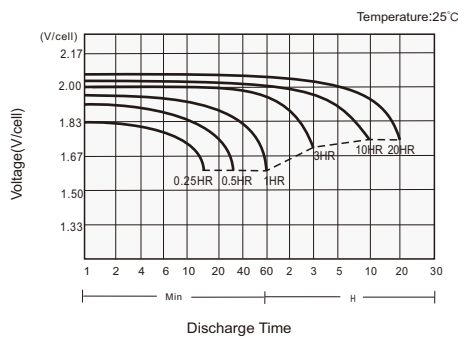
### GENERAL FEATURES

- 5 years design life (25°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

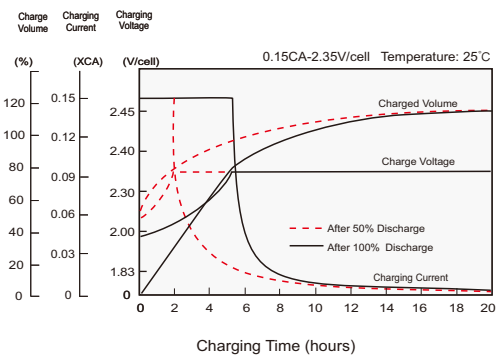
### STANDARDS

- 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

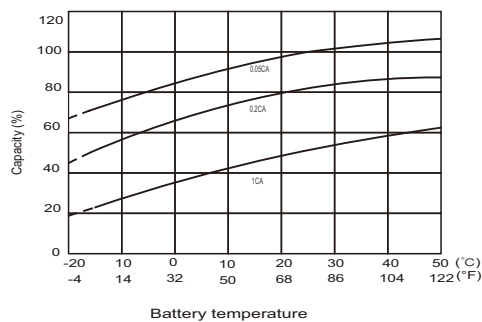
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

