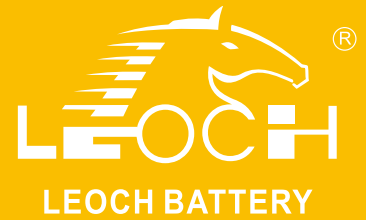




# LP Series-General Purpose LP4-10(4V10Ah)

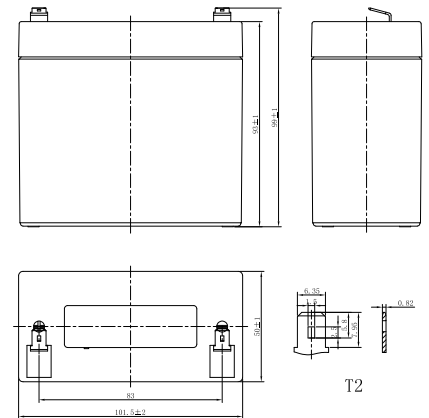


## Specifications

Rated Voltage	4V	
Nominal Capacity	10.0Ah	(C <sub>20</sub> , 1.75V/cell)
Dimension	Length	101.5±2mm (4.00 inches)
	Width	50±1mm (1.97 inches)
	Container Height	93±1mm (3.66 inches)
	Total Height	99±1mm (3.90 inches)
Approx Weight	1.14 Kg (2.51 lbs)	
Terminal	T1/T2	
Container Material	ABS	
Rated Capacity (25°C)	10.0 Ah	(20hr, 0.500A, 1.75V/cell)
	9.46 Ah	(10hr, 0.946A, 1.75V/cell)
	9.05 Ah	(5hr, 1.81A, 1.75V/cell)
	7.92 Ah	(3hr, 2.64A, 1.75V/cell)
	6.28 Ah	(1hr, 6.28A, 1.60V/cell)
Max. Discharge Current	150A (5s)	
Internal Resistance (25°C)	Approx 9.0mΩ	
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)	
Cycle Use	Initial Charging Current less than 3.0A. Voltage 4.8V~5.0V at 25°C(77°F)Temp. Coefficient -10mV/°C	
Standby Use	Initial Charging Current less than 3.0A. Voltage 4.5V~4.6V at 25°C(77°F)Temp. Coefficient -6mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LP series batteries may be stored for 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.	



## Layout



## Constant Current Discharge (Amperes) at 25 °C (77°F)

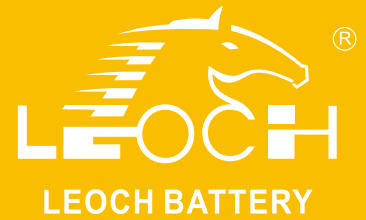
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.6	21.3	16.3	13.7	10.1	7.16	5.68	4.39	3.50	2.56	2.07	1.76	1.51	1.19	0.924	0.489
1.80V/cell	31.9	22.6	17.1	14.2	10.5	7.36	5.82	4.48	3.56	2.60	2.10	1.79	1.53	1.20	0.937	0.495
1.75V/cell	33.6	23.5	17.7	14.6	10.7	7.52	5.94	4.56	3.63	2.64	2.13	1.81	1.55	1.22	0.946	0.500
1.70V/cell	35.2	24.4	18.3	15.0	11.0	7.68	6.05	4.64	3.68	2.68	2.16	1.83	1.57	1.23	0.955	0.504
1.67V/cell	36.4	25.1	18.8	15.3	11.2	7.81	6.14	4.70	3.72	2.71	2.18	1.85	1.58	1.24	0.962	0.508
1.60V/cell	38.6	26.2	19.4	15.8	11.5	8.00	6.28	4.80	3.80	2.76	2.21	1.88	1.60	1.26	0.975	0.514

## 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	56.1	40.6	31.3	26.3	19.6	13.9	11.1	8.57	6.85	5.03	4.08	3.48	2.98	2.35	1.84	0.98
1.80V/cell	59.7	42.7	32.6	27.2	20.1	14.2	11.3	8.72	6.96	5.10	4.13	3.52	3.02	2.39	1.86	0.99
1.75V/cell	62.2	44.1	33.5	27.8	20.6	14.5	11.5	8.86	7.06	5.17	4.18	3.56	3.05	2.41	1.88	1.00
1.70V/cell	64.5	45.6	34.4	28.5	21.0	14.7	11.6	8.98	7.15	5.24	4.23	3.60	3.09	2.43	1.89	1.01
1.67V/cell	66.2	46.6	35.2	29.0	21.3	14.9	11.8	9.08	7.21	5.28	4.26	3.63	3.11	2.45	1.91	1.02
1.60V/cell	68.9	47.9	36.1	29.7	21.8	15.2	12.0	9.24	7.33	5.36	4.33	3.68	3.15	2.48	1.93	1.03



# LP Series-General Purpose LP4-10(4V10Ah)



## 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

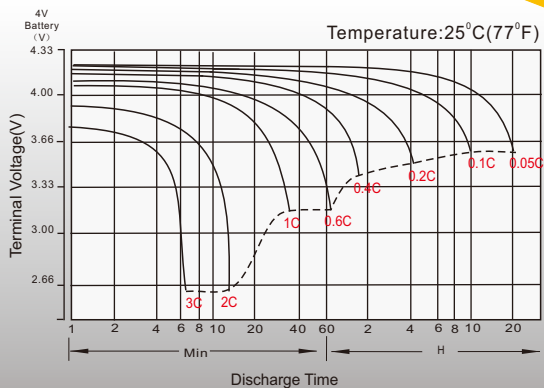
## General Features

- 5 years design life(25°C)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- High purity raw material: ensure low self discharge rate

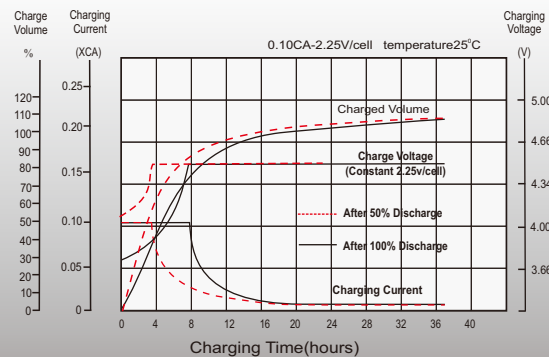
## Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch®IATF 16949, ISO45001, ISO 9001 and ISO 14001 certified production facilities

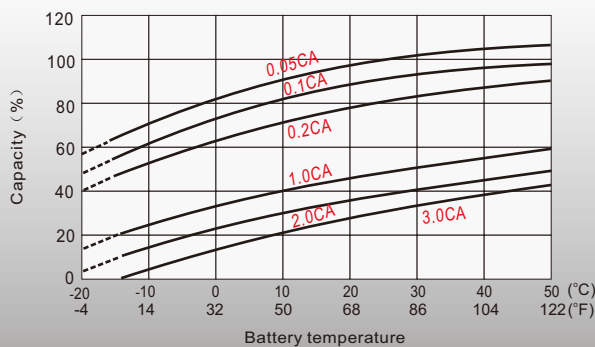
## Discharge Characteristics



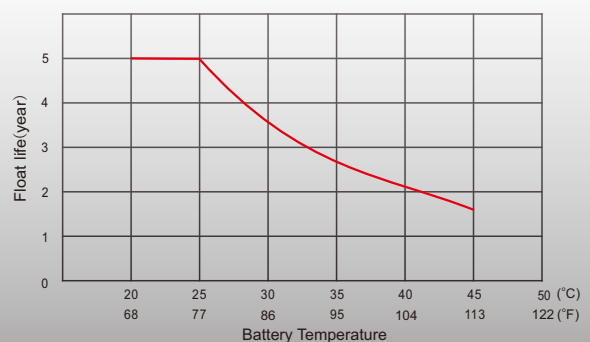
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Float Service Life



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