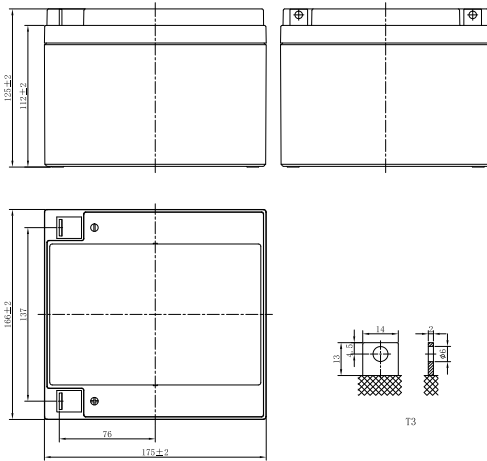


# LP SERIES-GENERAL PURPOSE

## LP12-24 (12V24Ah)



### CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C <sub>20</sub> : 1.75V/cell	24Ah
Dimension	Length	166mm (6.54inches)
	Width	175mm (6.89inches)
	Container Height	125mm (4.92inches)
	Total Height	125mm (4.92inches)
Approx Weight	7.20kg (15.9lbs)	
Terminal	T3	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	672A	
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%
	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	60.6	42.2	33.8	28.1	21.2	15.6	13.0	9.61	7.63	5.57	4.49	3.86	3.34	2.67	2.22	1.17
1.80V/cell	65.2	44.7	35.5	29.3	21.8	16.1	13.3	9.80	7.78	5.66	4.55	3.92	3.40	2.71	2.25	1.19
1.75V/cell	68.7	46.5	36.7	30.1	22.4	16.4	13.6	10.0	7.92	5.75	4.61	3.97	3.43	2.74	2.27	1.20
1.70V/cell	72.0	48.4	37.9	30.9	23.0	16.8	13.8	10.2	8.03	5.84	4.68	4.02	3.48	2.76	2.29	1.21
1.67V/cell	74.4	49.8	38.9	31.6	23.4	17.1	14.0	10.3	8.12	5.89	4.72	4.06	3.51	2.79	2.31	1.22
1.60V/cell	79.0	51.9	40.2	32.5	24.0	17.5	14.3	10.5	8.29	6.00	4.81	4.12	3.56	2.82	2.34	1.23
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	114.7	80.3	64.8	54.2	40.9	30.4	25.2	18.8	14.9	10.9	8.84	7.62	6.61	5.29	4.41	2.35
1.80V/cell	122.2	84.6	67.6	56.1	42.0	31.1	25.8	19.1	15.2	11.1	8.95	7.72	6.71	5.36	4.46	2.37
1.75V/cell	127.3	87.3	69.4	57.3	42.9	31.6	26.2	19.4	15.4	11.3	9.06	7.81	6.77	5.41	4.50	2.40
1.70V/cell	132.0	90.2	71.3	58.6	43.8	32.2	26.6	19.7	15.6	11.4	9.17	7.91	6.85	5.46	4.55	2.42
1.67V/cell	135.5	92.2	72.8	59.7	44.4	32.6	26.9	19.9	15.8	11.5	9.25	7.96	6.90	5.50	4.58	2.44
1.60V/cell	141.0	94.9	74.8	61.2	45.4	33.2	27.4	20.2	16.0	11.7	9.39	8.07	6.99	5.58	4.63	2.47

# LP SERIES-GENERAL PURPOSE

## LP12-24 (12V24Ah)



### 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

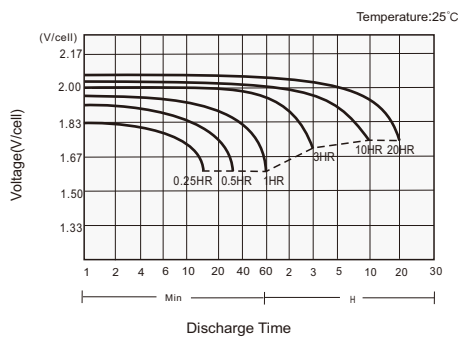
### GENERAL FEATURES

- 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

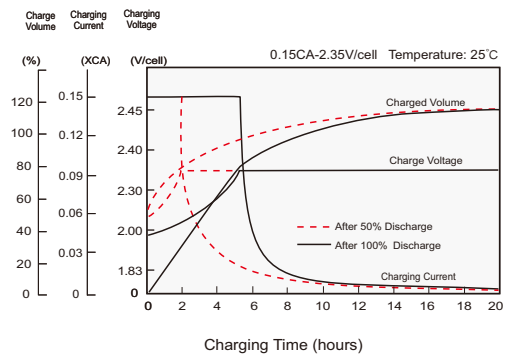
### STANDARDS

- 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

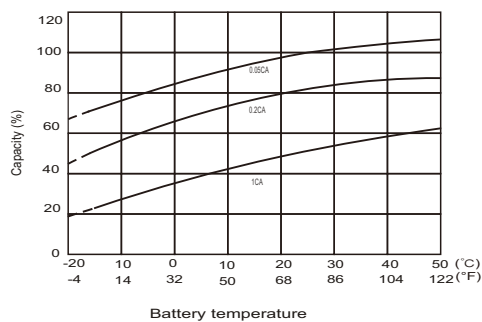
#### Discharge Characteristics



#### Charging Characteristics



#### Effects of Temperature on Capacity



#### Self Discharge Characteristics

