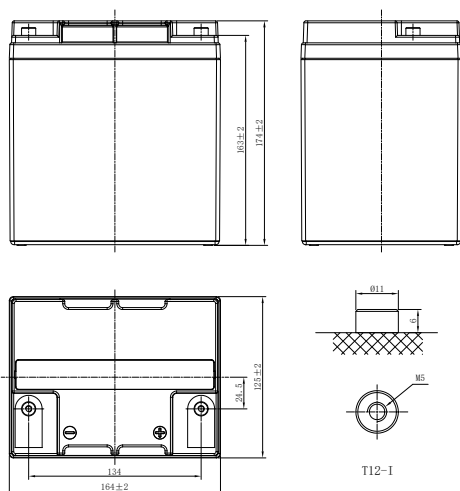


LP SERIES-GENERAL PURPOSE

LP12-24H (12V24Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₂₀ 1.75V/cell	24Ah
Dimension	Length	164mm (6.46inches)
	Width	125mm (4.92inches)
	Container Height	174mm (6.85inches)
	Total Height	174mm (6.85inches)
Approx Weight	7.60kg (16.8lbs)	
Terminal	T12-I(M5)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	672A	
Internal Resistance (25°C)	Approx 15 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	64.5	47.2	39.2	32.9	24.3	17.2	13.6	10.3	7.87	5.93	4.82	3.97	3.45	2.68	2.18	1.17
1.80V/cell	69.4	50.0	41.2	34.2	25.1	17.7	14.0	10.5	8.02	6.02	4.89	4.03	3.50	2.72	2.21	1.19
1.75V/cell	73.1	52.0	42.5	35.1	25.8	18.0	14.3	10.7	8.16	6.12	4.96	4.08	3.54	2.75	2.23	1.20
1.70V/cell	76.5	54.1	44.0	36.2	26.4	18.4	14.5	10.9	8.28	6.21	5.03	4.14	3.58	2.78	2.25	1.21
1.67V/cell	79.2	55.6	45.1	36.9	26.9	18.7	14.7	11.0	8.37	6.27	5.08	4.17	3.61	2.80	2.27	1.22
1.60V/cell	84.0	58.0	46.6	38.0	27.6	19.2	15.1	11.2	8.54	6.39	5.17	4.24	3.67	2.84	2.30	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	122.0	89.8	75.1	63.3	47.1	33.3	26.5	20.1	15.4	11.6	9.51	7.84	6.82	5.32	4.33	2.35
1.80V/cell	129.9	94.6	78.4	65.5	48.3	34.1	27.1	20.4	15.7	11.8	9.62	7.94	6.91	5.39	4.39	2.37
1.75V/cell	135.4	97.7	80.5	67.0	49.3	34.7	27.5	20.7	15.9	12.0	9.74	8.03	6.98	5.44	4.42	2.40
1.70V/cell	140.4	100.9	82.7	68.5	50.4	35.4	28.0	21.0	16.1	12.1	9.86	8.13	7.06	5.49	4.47	2.42
1.67V/cell	144.1	103.1	84.5	69.8	51.1	35.8	28.3	21.3	16.2	12.2	9.94	8.19	7.12	5.53	4.50	2.44
1.60V/cell	149.9	106.1	86.8	71.5	52.3	36.5	28.8	21.6	16.5	12.4	10.1	8.30	7.20	5.61	4.55	2.47

LP SERIES-GENERAL PURPOSE

LP12-24H (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

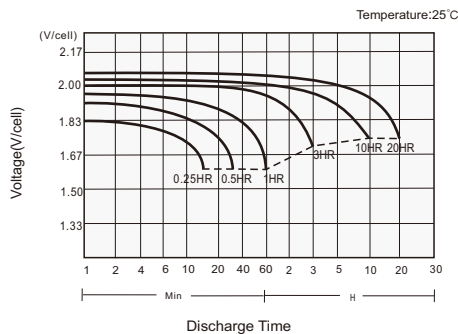
GENERAL FEATURES

- 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

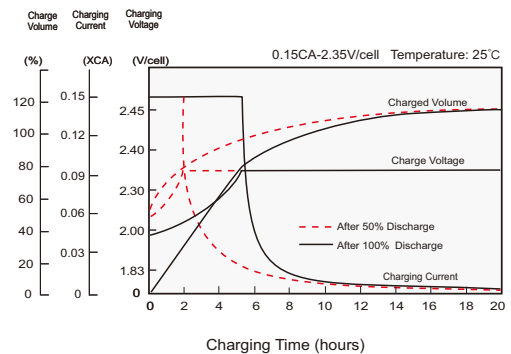
STANDARDS

- 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

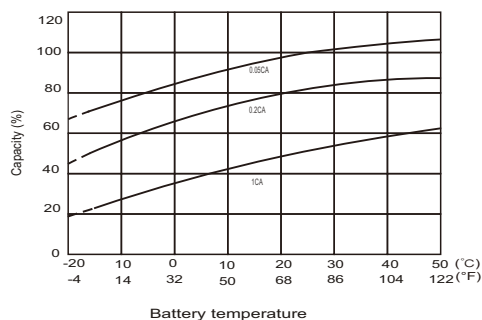
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

