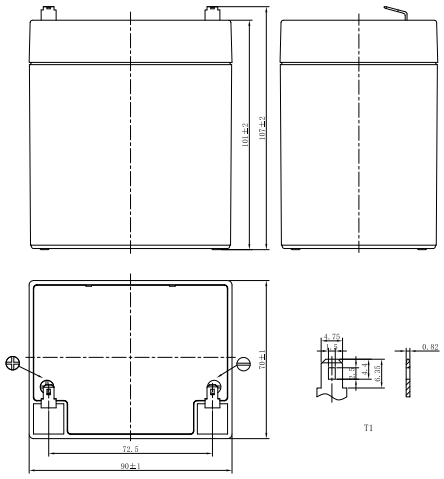
LP SERIES-GENERAL PURPOSE

LP12-5.4 (12V5.4Ah)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25℃)	C_{20},1.75V/cell	5.4Ah
Dimension	Length	90mm (3.54inches)
	Width	70mm (2.76inches)
	Container Height	101mm (3.98inches)
	Total Height	107mm (4.21inches)
Approx Weight		1.80kg (3.97lbs)
Terminal		T1
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		151.2A
Internal Resistance (25℃)		Approx 25 mΩ (Fully charged)
Operating Temp. Range	Discharge	-15~50℃ (5~122°F)
	Charge	-20~40℃ (-4~104°F)
	Storage	-15~40℃ (5~104°F)
Nominal Operating Temp. Range		25±3℃ (77±5°F)
Max.Charging Current (25℃)		0.3C
Charge voltage (25℃)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coeffcient	-3mV/cell/℃	-5mV/cell/℃
Effect of temp. to Capacity	40℃ (104°F)	103%
	25℃ (77°F)	100%
	0℃ (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	17.9	12.7	9.79	7.96	5.76	4.14	3.33	2.40	1.85	1.33	1.06	0.900	0.770	0.610	0.499	0.264
1.80V/cell	19.2	13.5	10.3	8.28	5.94	4.25	3.41	2.45	1.88	1.36	1.08	0.920	0.790	0.620	0.506	0.267
1.75V/cell	20.3	14.0	10.6	8.51	6.09	4.34	3.48	2.49	1.92	1.38	1.09	0.930	0.800	0.630	0.511	0.270
1.70V/cell	21.2	14.6	11.0	8.76	6.25	4.44	3.55	2.53	1.95	1.40	1.11	0.940	0.810	0.630	0.516	0.272
1.67V/cell	22.0	15.0	11.2	8.94	6.36	4.51	3.60	2.57	1.97	1.41	1.12	0.950	0.810	0.640	0.520	0.274
1.60V/cell	23.3	15.6	11.6	9.20	6.53	4.62	3.68	2.62	2.01	1.44	1.14	0.970	0.820	0.650	0.526	0.277

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	33.8	24.1	18.7	15.3	11.1	8.03	6.48	4.68	3.62	2.62	2.09	1.79	1.53	1.21	0.992	0.528
1.80V/cell	36.0	25.4	19.6	15.9	11.4	8.22	6.62	4.76	3.68	2.66	2.12	1.81	1.55	1.23	1.00	0.534
1.75V/cell	37.6	26.3	20.1	16.2	11.7	8.36	6.72	4.83	3.73	2.70	2.15	1.83	1.57	1.24	1.01	0.540
1.70V/cell	38.9	27.1	20.6	16.6	11.9	8.52	6.83	4.91	3.78	2.73	2.17	1.85	1.59	1.25	1.02	0.544
1.67V/cell	40.0	27.7	21.1	16.9	12.1	8.63	6.92	4.96	3.81	2.75	2.19	1.87	1.60	1.26	1.03	0.549
1.60V/cell	41.6	28.5	21.6	17.3	12.4	8.79	7.04	5.04	3.88	2.80	2.22	1.89	1.62	1.28	1.04	0.555

LP SERIES-GENERAL PURPOSE

LP12-5.4 (12V5.4Ah)

LEOCH BATTERY

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

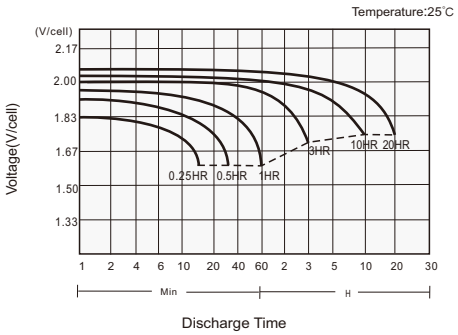
GENERAL FEATURES

- 5 years design life (25℃)
- 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

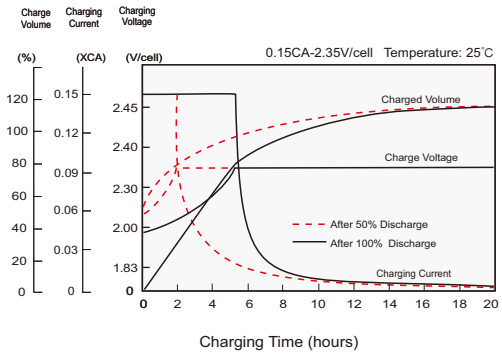
STANDARDS

- 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

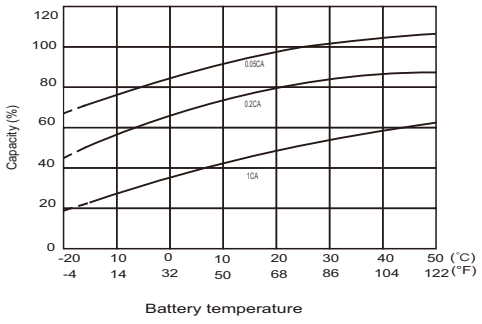
Discharge Characteristics



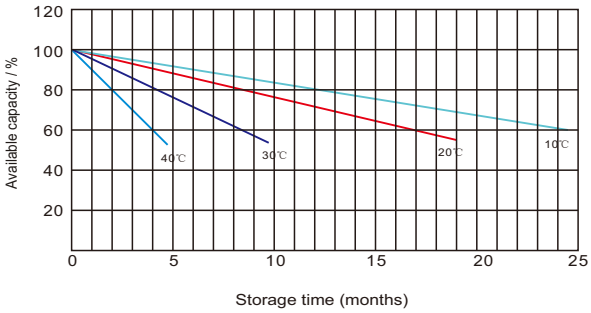
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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