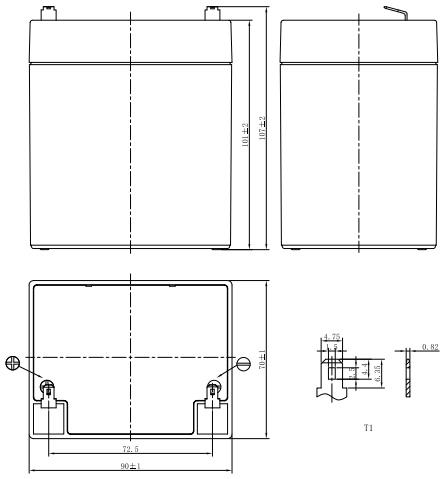
LP SERIES-GENERAL PURPOSE

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		1.72kg (3.79lbs)
Terminal		T1/T2
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		151.2A
Internal Resistance (25℃)		Approx 22 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	19.1	13.0	9.95	8.03	5.86	4.21	3.39	2.44	1.88	1.35	1.06	0.905	0.775	0.610	0.499	0.264
1.80V/cell	20.6	13.8	10.4	8.35	6.04	4.33	3.47	2.49	1.92	1.37	1.08	0.918	0.787	0.619	0.506	0.267
1.75V/cell	21.7	14.3	10.8	8.58	6.20	4.42	3.54	2.54	1.95	1.39	1.09	0.929	0.796	0.626	0.511	0.270
1.70V/cell	22.7	14.9	11.2	8.83	6.36	4.52	3.61	2.58	1.98	1.41	1.11	0.942	0.805	0.632	0.516	0.272
1.67V/cell	23.5	15.3	11.4	9.01	6.47	4.59	3.66	2.61	2.00	1.42	1.12	0.950	0.812	0.637	0.520	0.274
1.60V/cell	24.9	16.0	11.8	9.28	6.64	4.70	3.75	2.67	2.04	1.45	1.14	0.966	0.824	0.646	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	36.2	24.8	19.1	15.5	11.3	8.17	6.59	4.76	3.69	2.65	2.09	1.79	1.53	1.21	0.992	0.528
1.80V/cell	38.5	26.1	19.9	16.0	11.6	8.36	6.73	4.85	3.75	2.68	2.12	1.81	1.55	1.23	1.00	0.534
1.75V/cell	40.2	26.9	20.4	16.4	11.9	8.51	6.84	4.92	3.80	2.72	2.15	1.83	1.57	1.24	1.01	0.540
1.70V/cell	41.6	27.8	21.0	16.7	12.1	8.67	6.95	4.99	3.85	2.76	2.17	1.85	1.59	1.25	1.02	0.544
1.67V/cell	42.7	28.4	21.4	17.0	12.3	8.78	7.04	5.05	3.88	2.78	2.19	1.87	1.60	1.26	1.03	0.549
1.60V/cell	44.5	29.2	22.0	17.5	12.6	8.95	7.17	5.13	3.95	2.82	2.22	1.89	1.62	1.28	1.04	0.555

LP SERIES-GENERAL PURPOSE

LP12-5.4 (12V5.4Ah)

LEOCH BATTERY

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

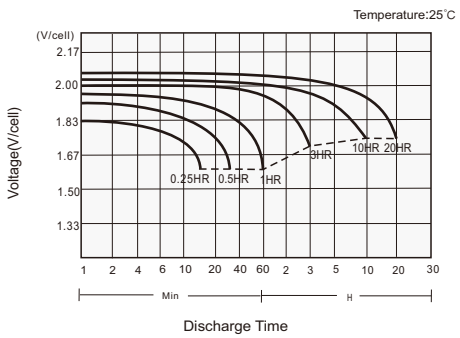
GENERAL FEATURES

- 5 years design life (25℃)
- 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

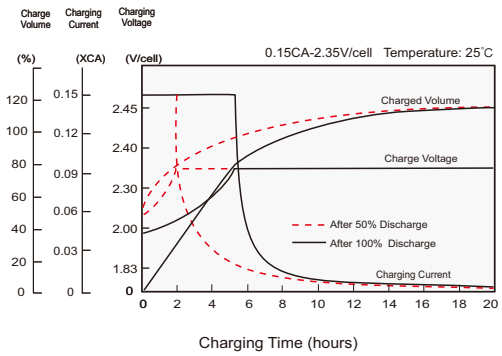
STANDARDS

- 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

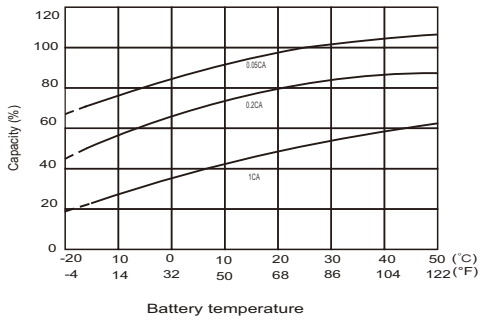
Discharge Characteristics



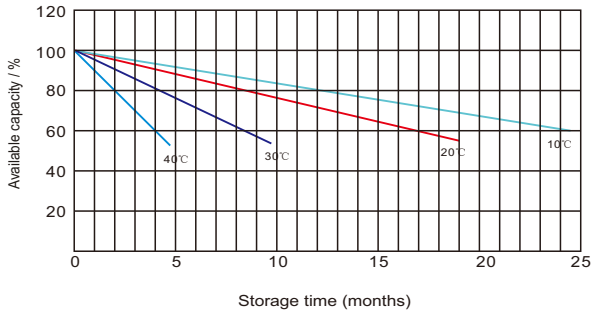
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



AUTO ELECTRICAL PARTS