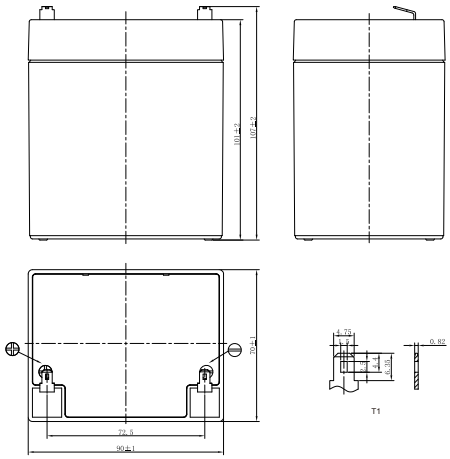
LP SERIES-GENERAL PURPOSE

LP12-5.4 (12V5.4Ah)

LEOCH BATTERY





CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	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		1.68kg (3.70lbs)
Terminal		T1/T2
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		151.2A
Internal Resistance (25˚C)		Approx 31 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. Coeffcient	-3mV/cell/˚C	-5mV/cell/˚C
Effect of temp. to Capacity	40˚C (104°F)	103%
	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	19.4	12.8	9.74	8.03	5.78	4.13	3.31	2.40	1.88	1.36	1.08	0.921	0.789	0.622	0.508	0.269
1.80V/cell	20.9	13.5	10.2	8.35	5.96	4.24	3.39	2.45	1.92	1.38	1.10	0.935	0.801	0.631	0.515	0.272
1.75V/cell	22.0	14.1	10.6	8.58	6.11	4.33	3.46	2.49	1.95	1.40	1.11	0.947	0.811	0.637	0.520	0.275
1.70V/cell	23.1	14.7	10.9	8.83	6.27	4.43	3.52	2.53	1.98	1.42	1.13	0.960	0.820	0.644	0.526	0.277
1.67V/cell	23.9	15.1	11.2	9.01	6.38	4.50	3.57	2.57	2.00	1.44	1.14	0.968	0.828	0.649	0.529	0.279
1.60V/cell	25.3	15.7	11.6	9.28	6.55	4.61	3.65	2.62	2.04	1.46	1.16	0.983	0.839	0.658	0.536	0.282
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	36.8	24.3	18.6	15.5	11.2	8.01	6.43	4.68	3.69	2.67	2.13	1.82	1.56	1.23	1.01	0.538
1.80V/cell	39.3	25.7	19.5	16.0	11.5	8.20	6.57	4.76	3.75	2.71	2.16	1.84	1.58	1.25	1.02	0.544
1.75V/cell	41.1	26.5	20.0	16.4	11.7	8.35	6.68	4.83	3.80	2.75	2.19	1.86	1.60	1.26	1.03	0.550
1.70V/cell	42.7	27.4	20.5	16.7	12.0	8.50	6.78	4.91	3.85	2.78	2.21	1.89	1.62	1.27	1.04	0.554
1.67V/cell	44.0	28.1	21.0	17.0	12.1	8.62	6.87	4.96	3.88	2.80	2.23	1.90	1.63	1.28	1.05	0.559
1.60V/cell	46.3	29.1	21.6	17.5	12.4	8.78	6.99	5.04	3.95	2.85	2.26	1.93	1.65	1.30	1.06	0.565

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

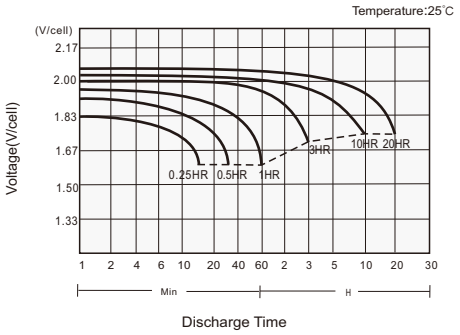
GENERAL FEATURES

- 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

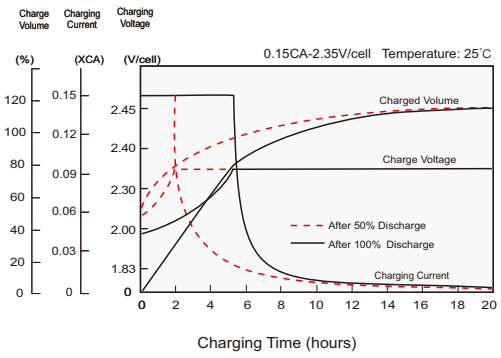
STANDARDS

- 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

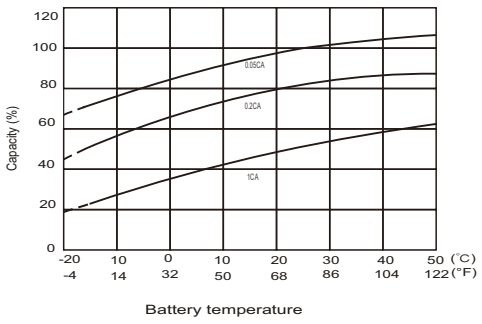
Discharge Characteristics



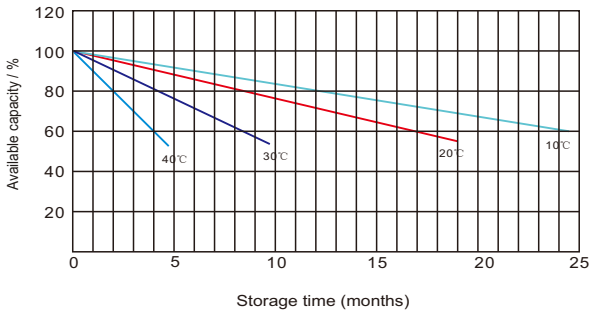
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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