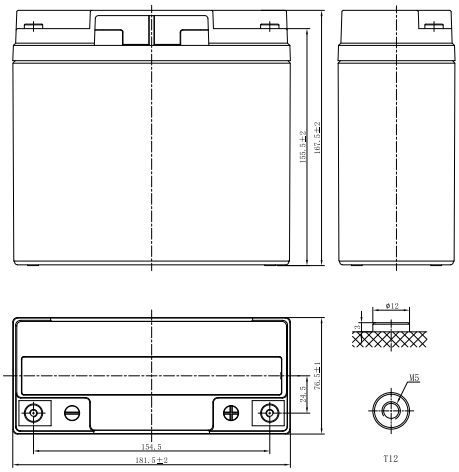
LPL SERIES-LONG LIFE STANDBY

LPL12-18 (12V18Ah)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	C_{20},1.75V/cell	18Ah
Dimension	Length	181.5mm (7.15inches)
	Width	76.5mm (3.01inches)
	Container Height	167.5mm (6.59inches)
	Total Height	167.5mm (6.59inches)
Approx Weight		5.70kg (12.6lbs)
Terminal		T12/T12-I(M5)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		504A
Internal Resistance (25˚C)		Approx 16 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). LPL 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	41.2	36.0	29.0	24.3	18.3	13.6	11.1	7.99	6.43	4.70	3.70	3.08	2.64	2.07	1.67	0.882
1.80V/cell	43.3	37.8	30.1	25.1	18.7	13.8	11.3	8.12	6.53	4.77	3.76	3.12	2.67	2.10	1.69	0.891
1.75V/cell	45.3	39.6	31.2	25.8	19.2	14.1	11.5	8.25	6.63	4.84	3.81	3.16	2.70	2.12	1.71	0.900
1.70V/cell	47.5	41.5	32.3	26.6	19.6	14.4	11.7	8.39	6.73	4.91	3.86	3.21	2.74	2.15	1.73	0.910
1.67V/cell	48.8	42.6	33.0	27.0	19.9	14.5	11.8	8.47	6.80	4.95	3.89	3.23	2.76	2.17	1.74	0.915
1.60V/cell	51.8	45.2	34.5	28.1	20.5	14.9	12.1	8.65	6.93	5.05	3.97	3.29	2.81	2.20	1.77	0.928
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	79.1	68.8	55.6	46.8	35.3	26.3	21.6	15.6	12.6	9.23	7.30	6.09	5.22	4.11	3.31	1.76
1.80V/cell	82.7	71.9	57.5	48.0	36.0	26.7	21.9	15.8	12.7	9.35	7.39	6.16	5.28	4.16	3.35	1.78
1.75V/cell	86.3	75.0	59.3	49.2	36.7	27.2	22.2	16.0	12.9	9.47	7.48	6.23	5.34	4.20	3.39	1.80
1.70V/cell	89.8	78.1	61.1	50.4	37.4	27.6	22.5	16.2	13.1	9.59	7.57	6.30	5.40	4.25	3.43	1.82
1.67V/cell	91.9	79.9	62.2	51.2	37.8	27.8	22.7	16.4	13.2	9.66	7.62	6.34	5.44	4.28	3.45	1.83
1.60V/cell	96.8	84.1	64.5	52.8	38.8	28.4	23.1	16.6	13.4	9.82	7.74	6.44	5.52	4.34	3.50	1.86

LPL SERIES-LONG LIFE STANDBY

LPL12-18 (12V18Ah)

LEOCH BATTERY

APPLICATIONS

- UPS and EPS
- Emergency light
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply, DC power supply

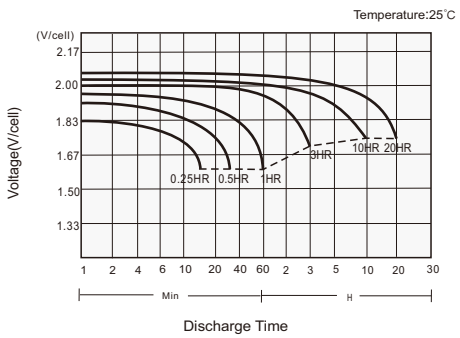
GENERAL FEATURES

- 10~12 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

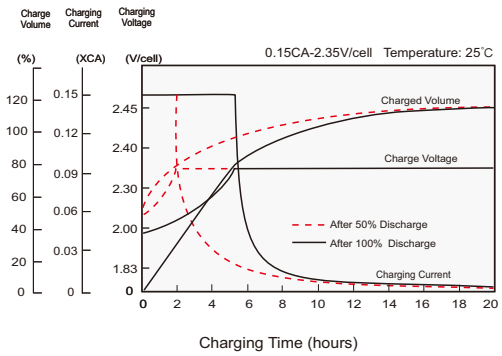
STANDARDS

- 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

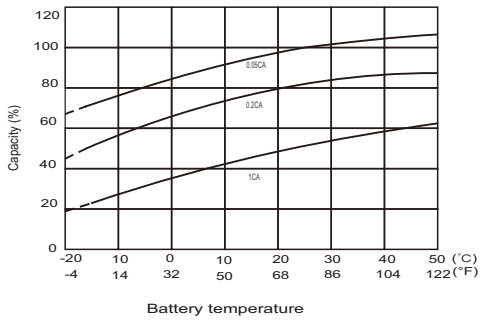
Discharge Characteristics



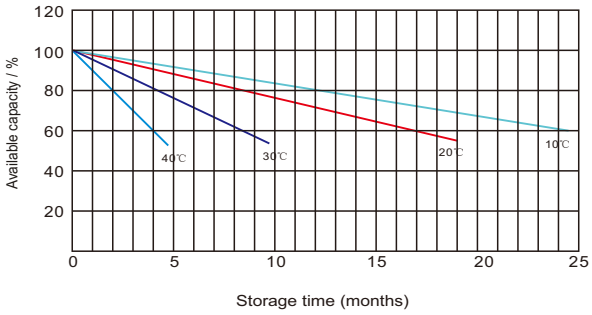
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



Leoch International Technology Ltd.
www.leoch.com

Leoch Batteries Pte Ltd
www.leoch.sg

Leoch Battery Corporation
www.leochamericas.com

Leoch Europe S.A.
www.leoch.eu

Data above is recommended and the picture is only for battery effect display, Leoch reserve the final right of explanation.
© LEOCH. All rights reserved.Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.Subject to revisions without prior notice. E&OE.

Publication No.:LB-LPL12-18-PD-EN-V2.0-20240305