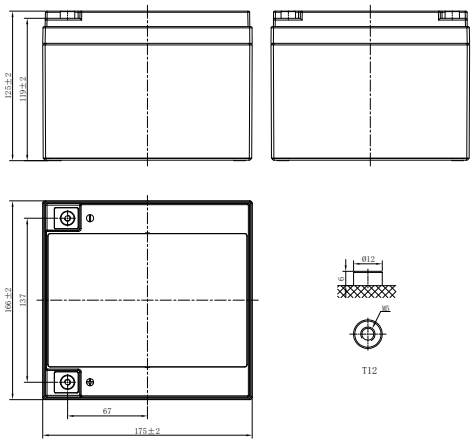
LPL SERIES-LONG LIFE STANDBY

LPL12-24 (12V24Ah)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	C_{20},1.75V/cell	24Ah
Dimension	Length	166mm (6.54inches)
	Width	175mm (6.89inches)
	Container Height	125mm (4.92inches)
	Total Height	125mm (4.92inches)
Approx Weight		7.60kg (16.8lbs)
Terminal		T12/T12-I(M5)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		672A
Internal Resistance (25˚C)		Approx 13 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	53.1	45.9	37.3	31.6	23.8	18.0	14.8	10.6	8.46	6.33	5.07	4.32	3.69	2.90	2.33	1.18
1.80V/cell	55.7	48.2	38.8	32.6	24.4	18.4	15.0	10.7	8.59	6.43	5.15	4.38	3.74	2.94	2.35	1.19
1.75V/cell	58.5	50.6	40.2	33.5	25.0	18.8	15.3	10.9	8.73	6.52	5.22	4.43	3.79	2.97	2.38	1.20
1.70V/cell	61.2	52.9	41.6	34.5	25.5	19.1	15.6	11.1	8.86	6.62	5.29	4.49	3.84	3.01	2.41	1.21
1.67V/cell	62.9	54.4	42.5	35.1	25.9	19.3	15.7	11.2	8.95	6.67	5.33	4.53	3.87	3.03	2.43	1.22
1.60V/cell	66.6	57.6	44.4	36.5	26.7	19.9	16.1	11.5	9.13	6.81	5.43	4.61	3.94	3.08	2.46	1.24
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	102.2	87.8	71.7	60.8	46.0	35.0	28.7	20.6	16.6	12.4	10.0	8.52	7.31	5.75	4.62	2.35
1.80V/cell	106.8	91.7	74.1	62.4	46.9	35.6	29.1	20.9	16.8	12.6	10.1	8.63	7.39	5.82	4.67	2.37
1.75V/cell	111.4	95.7	76.4	63.9	47.8	36.1	29.6	21.2	17.0	12.8	10.2	8.73	7.47	5.89	4.73	2.40
1.70V/cell	116.0	99.6	78.7	65.6	48.7	36.7	30.0	21.5	17.2	12.9	10.4	8.83	7.56	5.95	4.78	2.42
1.67V/cell	118.6	101.9	80.1	66.5	49.3	37.0	30.2	21.7	17.4	13.0	10.4	8.89	7.61	5.99	4.81	2.44
1.60V/cell	124.8	107.2	83.2	68.6	50.5	37.8	30.8	22.0	17.6	13.2	10.6	9.02	7.73	6.09	4.88	2.47

LPL SERIES-LONG LIFE STANDBY

LPL12-24 (12V24Ah)

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

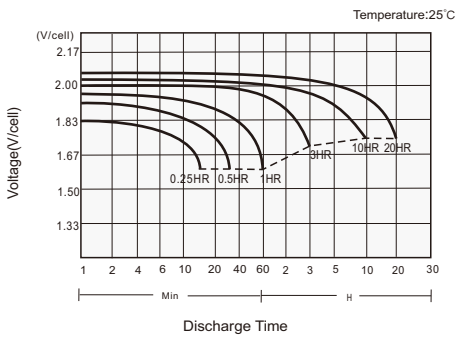
GENERAL FEATURES

- 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

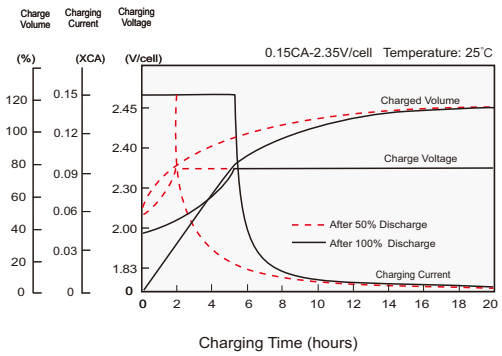
STANDARDS

- 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

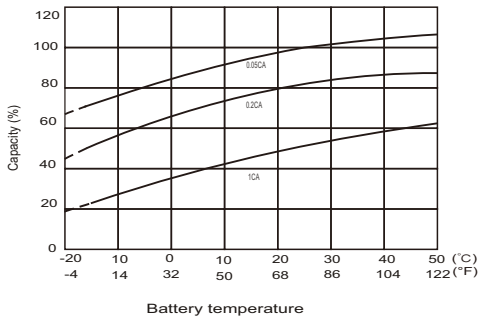
Discharge Characteristics



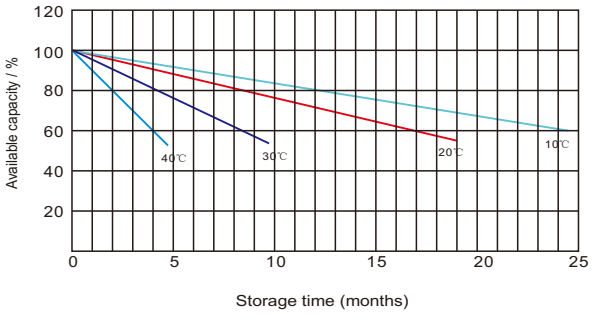
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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