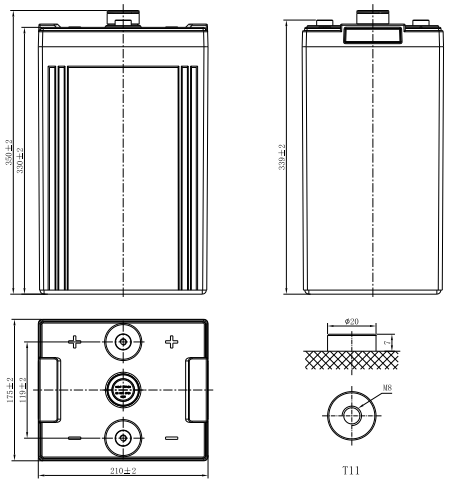
LP SERIES-GENERAL PURPOSE

LP2-450 (2V450Ah)

LEOCH BATTERY





CHARACTERISTICS

Item		Specifications
Rated Voltage		2V
Nominal Capacity (25℃)	C_{10},1.80V/cell	450Ah
Dimension	Length	210mm (8.27inches)
	Width	175mm (6.89inches)
	Container Height	330mm (13.0inches)
	Total Height	350mm (13.8inches)
Approx Weight		26.0kg (57.3lbs)
Terminal		T11(M8)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		5400A
Internal Resistance (25℃)		Approx 0.6 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	2.35-2.40V/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	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	337.8	305.4	283.5	247.6	216.8	170.9	138.5	105.3	84.7	71.5	62.1	50.4	42.2	22.6
1.80V/cell	419.2	371.4	325.6	276.9	239.9	187.0	150.7	114.0	91.4	77.0	66.6	54.0	45.0	23.9
1.75V/cell	462.4	391.6	340.7	288.2	248.8	193.3	155.3	117.0	93.6	78.8	68.0	55.0	45.7	24.2
1.70V/cell	514.6	438.3	362.7	299.1	257.9	199.8	160.2	120.4	96.0	80.6	69.4	56.0	46.5	24.5
1.67V/cell	532.7	453.5	372.7	305.8	263.3	203.4	162.9	122.3	97.3	81.6	70.3	56.6	46.8	24.7
1.60V/cell	559.5	472.6	379.7	321.6	276.1	212.5	169.7	126.8	100.6	84.1	72.2	57.9	47.8	25.1
Constant Power Discharge (Watts/cell) at 25°C (77°F)														
F.V/Time	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	621.9	564.8	520.6	480.2	421.3	333.2	270.6	206.6	166.5	140.8	122.4	99.7	83.5	45.0
1.80V/cell	763.9	680.3	592.8	533.0	463.1	362.5	293.0	222.6	178.9	151.1	131.0	106.5	88.9	47.4
1.75V/cell	833.5	710.2	614.9	550.4	476.8	372.4	300.3	227.5	182.6	154.1	133.3	108.2	90.2	48.0
1.70V/cell	917.0	787.0	648.5	566.8	491.0	382.7	308.3	233.1	186.6	157.2	135.8	109.9	91.5	48.5
1.67V/cell	942.9	809.0	659.9	576.6	498.8	388.2	312.3	235.9	188.7	158.8	137.2	110.9	92.2	48.9
1.60V/cell	972.8	829.7	666.4	600.0	518.2	402.1	322.9	243.2	194.0	162.9	140.5	113.2	93.9	49.7

LP SERIES-GENERAL PURPOSE

LP2-450 (2V450Ah)

LEOCH BATTERY

APPLICATIONS

- Tele-communication central station (wired or cellular)
- Power system communication, military communication, etc.
- Network communication including: data transmission, television signal transmission, etc.
- Uninterruptable Power System (UPS - for Telecom)

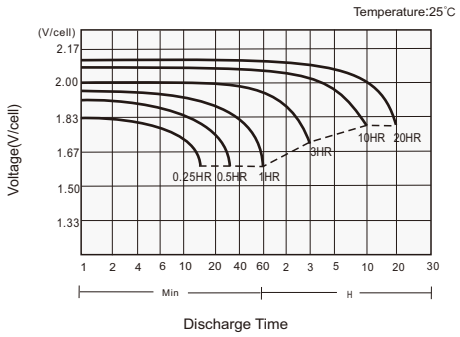
GENERAL FEATURES

- 15 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

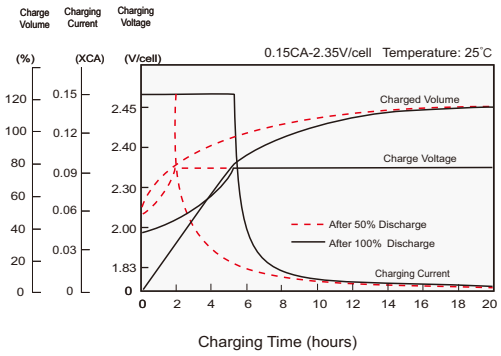
STANDARDS

- 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

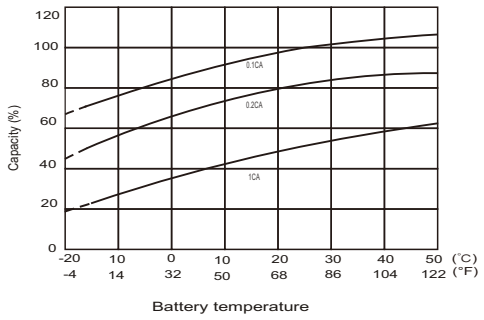
Discharge Characteristics



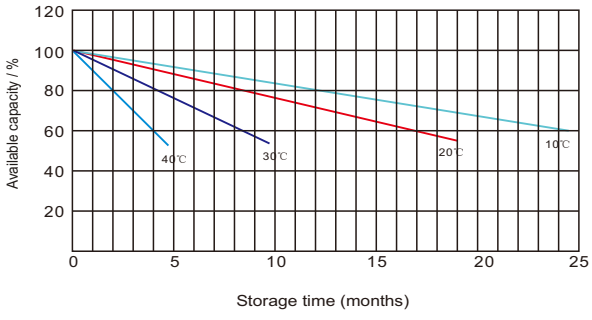
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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