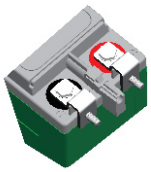
PLH+C-Pure Lead Carbon
PLH+C 90FT (12V90Ah)

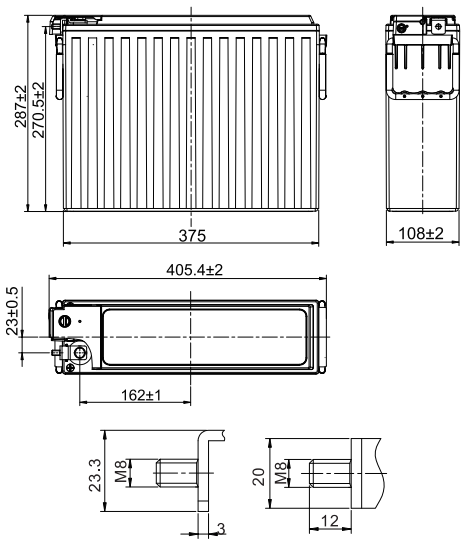
LEOCH BATTERY

Specifications

Rated Voltage		12V
Nominal Capacity	C_{10},1.80V/cell	90Ah
	C_8,1.75V/cell	90Ah
Dimension	Length	405.4±2mm (15.96 inches)
	Width	108±2mm (4.25 inches)
	Container Height	287±2mm (11.30 inches)
	Total Height	287±2mm (11.30 inches)
Approx. Weight		28.7 Kg (63.3 lbs)
Terminal		M8
Container Material		PC-ABS flame retardant jar and cover to UL94 V-0
Rated Capacity (25°C)	90.0 Ah	(10hr, 9.00A,1.80V/cell)
	90.4 Ah	(8hr, 11.3A,1.75V/cell)
	85.0 Ah	(5hr, 17.0A,1.75V/cell)
	76.8 Ah	(3hr, 25.6A,1.75V/cell)
	66.1 Ah	(1hr, 66.1A,1.67V/cell)
Max. Discharge Current		1080A
Internal Resistance (25°C)		Approx. 4.8mΩ(Fully charged)
Operating Temp.Range	Discharge	-40 ~ 65°C (-40 ~ 149°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-20 ~ 40°C (-4 ~ 104°F)
Nominal Operating Temp. Range		25±3°C (77±5°F)
Max.Charging Current(25°C)		27A
Charge voltage(25°C)	Float	13.62V
	Temp. Coefficient	-3mV/cell/°C
	Equalization	14.1~14.4V
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	PLH+C series batteries can be stored up to 24 months at 25°C(77°F), For higher temperatures the time interval will be shorter. Battery needs to be given a freshening charge when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.	



Layout



Unit: mm

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	171.8	141.4	121.0	94.8	72.3	58.9	34.5	24.7	20.0	16.4	10.9	8.91	4.78
1.80V/cell	188.7	153.3	129.9	100.3	75.6	61.2	35.2	25.1	20.3	16.7	11.1	9.00	4.89
1.75V/cell	206.3	165.3	138.8	106.0	79.1	63.5	36.2	25.6	20.7	17.0	11.3	9.22	4.99
1.70V/cell	222.0	175.7	146.2	110.6	81.9	65.3	36.9	25.9	21.0	17.3	11.4	9.31	5.06
1.67V/cell	230.3	180.9	149.9	112.8	83.1	66.1	37.2	26.1	21.1	17.3	11.5	9.31	5.09
1.60V/cell	245.6	189.5	155.6	115.9	84.8	67.3	37.6	26.5	21.4	17.5	11.7	9.49	5.13

Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10 min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	325.3	265.3	225.9	178.0	139.5	114.2	67.6	48.7	39.3	32.6	21.6	17.7	9.46
1.80V/cell	361.1	283.2	239.0	187.6	144.0	119.2	69.6	49.2	40.1	33.0	21.8	18.0	9.73
1.75V/cell	377.5	293.6	246.4	192.2	146.8	120.6	71.1	50.0	40.7	33.5	22.1	18.2	9.87
1.70V/cell	393.3	303.6	253.6	196.7	149.5	122.5	71.6	50.7	41.2	33.9	22.4	18.4	9.97
1.67V/cell	410.8	314.9	261.9	202.0	152.9	124.9	72.9	51.0	41.4	34.1	22.5	18.5	10.1
1.60V/cell	423.4	322.6	267.1	205.0	153.7	125.3	73.1	51.4	41.7	34.3	22.7	19.0	10.1

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LEOCH BATTERY

Applications

- Backup Power
- Grid-connected Energy Storage System
- Off-grid Energy Storage System
- Demand charge reduction
- Time-of-Use bill management

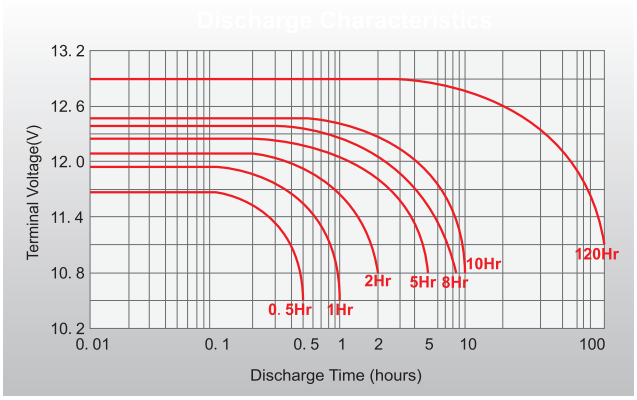
General Features

- High energy density
- Low internal resistance and self-discharge rate
- Excellent fast charging acceptance: 1.5hour to 90% SOC
- Excellent high rate discharge performance in low temperature
- Super high PSoC cycle life

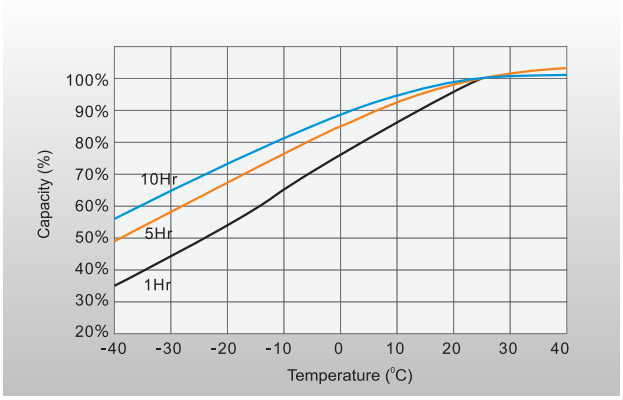
Standards

- Compliance with IEC 60896 standards
- Manufactured in Leoch®IATF16949, OHSAS 18001,ISO 9001 and ISO 14001 certified production facilities

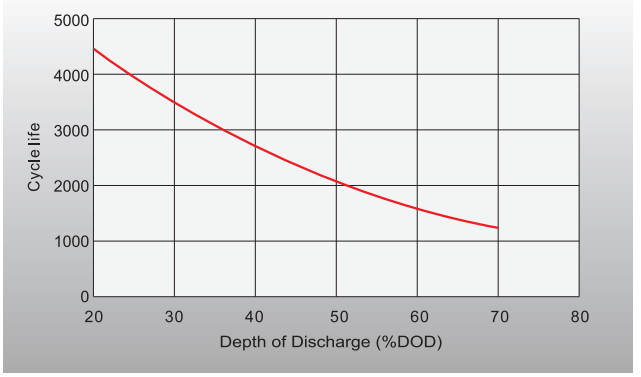
Discharge Characteristics



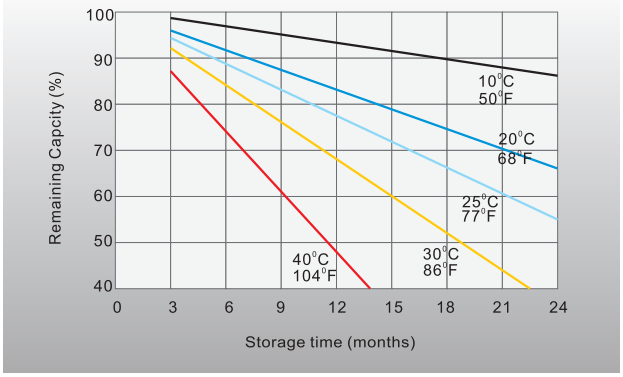
Temperature in Relation to Capacity



Cycle Life vs. Depth of Discharge



Self-discharge Characteristics



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