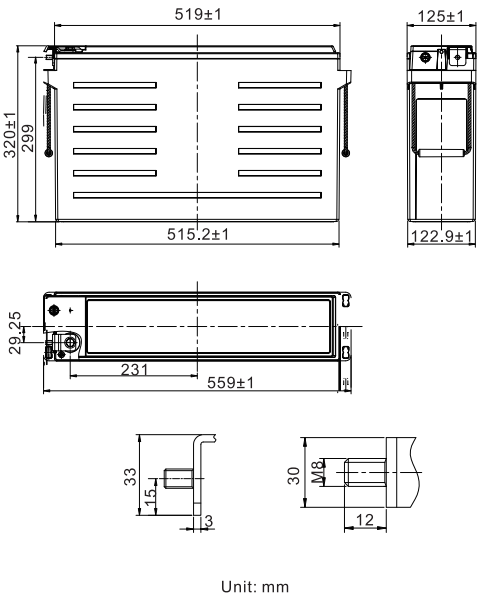
PLH+C-Pure Lead Carbon
PLH+C 190FT (12V190Ah)

LEOCH BATTERY

Specifications

Rated Voltage		12V
Nominal Capacity	C_{10},1.80V/cell	190Ah
	C_8,1.75V/cell	190Ah
Dimension	Length	559±1mm (22.01 inches)
	Width	125±1mm (4.92 inches)
	Container Height	320±1mm (12.6 inches)
	Total Height	320±1mm (12.6 inches)
Approx. Weight		57.6 Kg (127.0 lbs)
Terminal		M8
Container Material		PC-ABS flame retardant jar and cover to UL94 V-0
Rated Capacity (25°C)	190.0 Ah	(10hr, 19.0A,1.80V/cell)
	190.4 Ah	(8hr, 23.8A,1.75V/cell)
	167.0 Ah	(5hr, 33.4A,1.75V/cell)
	132.9 Ah	(3hr, 44.3A,1.75V/cell)
	101.8 Ah	(1hr, 101.8A,1.67V/cell)
Max. Discharge Current		2280A
Internal Resistance (25°C)		Approx. 3.0mΩ(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)		57.0A
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	271.5	212.8	176.7	139.6	107.3	87.5	53.2	41.8	36.6	32.7	22.7	18.9	10.1
1.80V/cell	300.1	228.0	191.6	149.8	114.3	93.0	55.1	43.1	37.1	33.1	23.4	19.0	10.3
1.75V/cell	324.5	243.2	205.0	158.4	119.8	97.0	57.0	44.3	37.5	33.4	23.8	19.7	10.5
1.70V/cell	343.6	258.4	216.7	165.7	124.4	100.3	58.9	45.6	38.5	33.8	24.0	19.9	10.6
1.67V/cell	352.8	273.6	222.4	169.3	126.5	101.8	59.9	46.9	39.4	34.6	24.2	20.1	10.7
1.60V/cell	359.1	288.8	232.2	175.1	129.8	104.3	60.8	48.1	40.4	35.0	24.3	20.1	10.7

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	499.5	408.7	341.7	272.3	210.9	173.0	103.7	85.8	73.8	65.1	45.4	37.7	20.1
1.80V/cell	538.1	433.5	370.5	292.7	225.5	184.2	109.0	87.2	74.7	65.8	46.3	38.1	20.5
1.75V/cell	575.5	457.5	391.6	306.5	234.1	190.6	112.2	88.5	75.6	65.8	46.9	38.9	20.9
1.70V/cell	611.8	480.7	409.0	317.6	241.2	195.7	114.5	89.8	75.7	65.9	47.2	39.2	20.9
1.67V/cell	628.7	505.8	416.0	322.9	244.3	196.8	115.5	90.3	75.9	65.9	47.3	39.4	21.0
1.60V/cell	638.4	524.9	424.4	327.8	246.3	199.2	116.5	91.0	76.3	66.0	47.4	40.0	21.0

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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

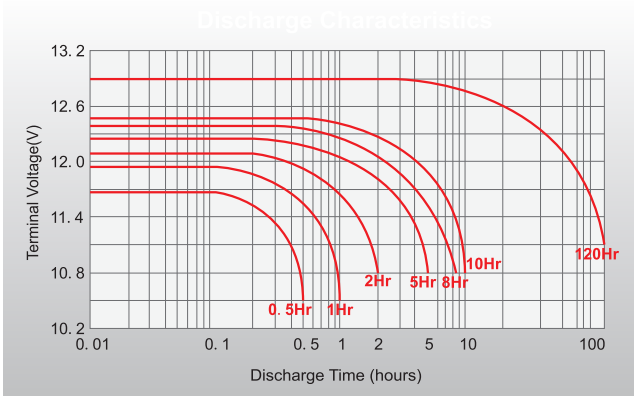
General Features

- 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

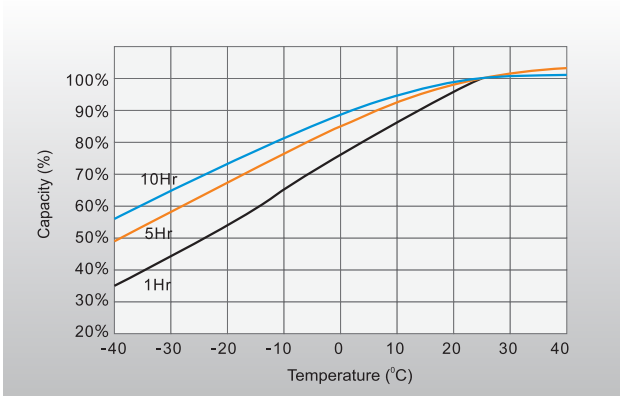
Standards

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

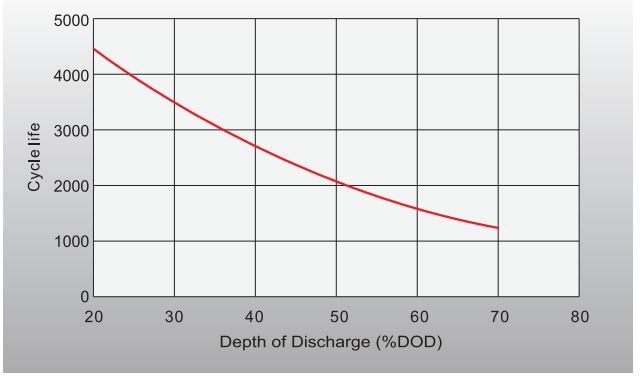
Discharge Characteristics



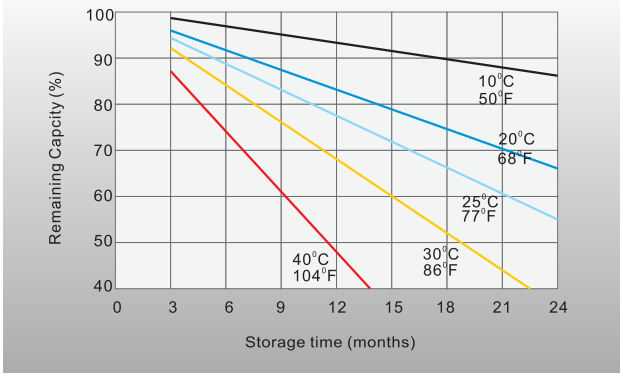
Temperature in Relation to Capacity



Cycle Life vs. Depth of Discharge



Self-discharge Characteristics



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