

POWER TO CONNECT



Series:

- AGM Front Terminal LPF series
- Pure Lead Floating
 PLH series
- Pure Lead Carbon High Endurance PLH+C series

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- High Temperature LHT series
- Tubular Gel OPzV series
- Li-lon 48V LFeLi series



LEOCH BATTERY UK LTD., a subsidiary of LEOCH International Holdings Pte Ltd, was established in 2020 aiming to expand the globally renowned **LEOCH brand lead acid and lithium batteries in the UK and Ireland** by working closely with major OE manufactures, distributors and service providers as well as B2B customers who use our batteries.

LEOCH retains ten (10) regional manufacturing plants located in **PRC**, **Malaysia**, **Sri Lanka**, **India and Vietnam**, producing mainly reserve power batteries, SLI batteries and motive power batteries with an annual production capacity of over 20GVAh / year.

Your Global Battery Partner

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U.S.A



Sales

Д	<u>_</u>
	41

Manufacturing Plants

10

GWH Production Capacity per Year

24

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Subsidiaries and Sales Offices Worldwide

16



12.000 Employees

Worldwide



105

Production

Lines

3.000 Customers around the World





...covering your needs for telecommunication

We manufacture a wide range of Premium Lead Acid and Lithium-Ion batteries to cover any telecommunications requirement. Aiming to deliver an unprecedented value to your needs, these solutions offer exceptional performance, longlife, high energy density, ease of installation and hassle-free operation for a broad spectrum of telecom applications.





LEOCH Premium Front Terminal batteries, LPF series, are AGM Valve-Regulated Lead-Acid front terminal batteries that have been optimized for telecom applications. Engineered for long life floating applications such as Base Transceiver Stations, LPF batteries offer a 12-year life design and a front terminal design for easy installation and maintenance.

GENERAL FEATURES



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Ideal for 19-inch or 23-inch telecom cabinets



Unique anti-explosion one-way vent valve design to minimize water loss and increase safety



Front terminal design makes the installation & maintenance "hassle free"

Shielded design terminal caps reduces

risk of short circuits and improves safety



Thick plates using a special pasting formula ensures long service life



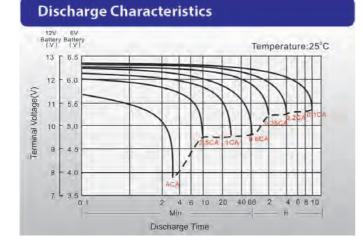


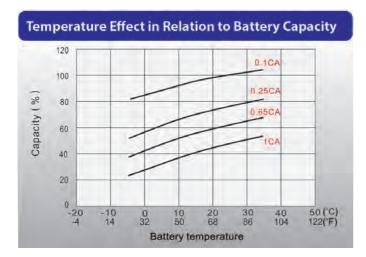
ABS case UL94-HB (UL94-V0 Optional) is used for increased container strength

	Nominal	Rated Capacity			Appro	x. Dime	nsions				Арр	rox.	
Model	Voltage (V)	10Hr @ 1.80V/cell	Len	Length		th	Heig	ght	Total H	eight	Weight		Terminal Type
			mm	in.	mm	in.	mm	in.	mm	in.	kg	lbs	
LPF12-40	12	40	277.00	10.91	106.00	4.17	222.00	8.74	222.00	8.74	14.60	32.19	M6
LPF12-50	12	50	390.00	15.35	105.00	4.13	200.00	7.87	200.00	7.87	18.50	40.79	M6
LPF12-55	12	55	277.00	10.91	106.00	4.17	222.00	8.74	222.00	8.74	17.30	38.14	M6
LPF12-70	12	70	564.00	22.20	114.00	4.49	187.00	7.36	187.00	7.36	25.50	56.22	M6
LPF12-75	12	75	564.00	22.20	114.00	4.49	187.00	7.36	187.00	7.36	26.00	57.32	M6
LPF12-90	12	90	394.00	15.51	110.00	4.33	285.00	11.22	285.00	11.22	31.00	68.34	M6
LPF12-100	12	100	394.00	15.51	110.00	4.33	286.00	11.26	286.00	11.26	31.00	68.34	M6
LPF12-100A	12	100	508.00	20.00	110.00	4.33	238.50	9.39	238.50	9.39	32.00	70.55	M6
LPF12-125	12	125	551.00	21.69	110.00	4.33	288.00	11.34	288.00	11.34	41.50	91.49	M6
LPF12-150	12	150	551.00	21.69	110.00	4.33	288.00	11.34	288.00	11.34	44.80	98.77	M6
LPF12-150V	12	150	550.00	21.65	125.00	4.92	281.50	11.08	281.50	11.08	50.60	111.55	M6
LPF12-170	12	170	550.00	21.65	125.00	4.92	281.50	11.08	281.50	11.08	51.00	112.43	M6
LPF12-180	12	180	550.00	21.65	125.00	4.92	280.00	11.02	280.00	11.02	51.20	112.88	M6
LPF12-190	12	190	560.00	22.05	126.00	4.96	320.00	12.60	320.00	12.60	57.00	125.66	M6
LPF12-200	12	200	560.00	22.05	126.00	4.96	320.00	12.60	320.00	12.60	61.00	134.48	M8

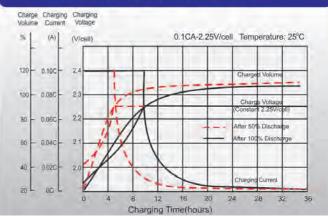


PERFORMANCE CHARACTERISTICS

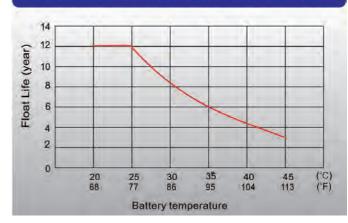




Floating Charging Characteristics



Temperature Effect on Long Term Float Life



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LEOCH Pure Lead Floating front Terminal batteries, PLH series, are AGM Valve-Regulated Lead-Acid front terminal batteries that have been optimized for extreme long-life telecom applications. Engineered for high endurance telecom applications such as harsh conditions Base Transceiver Stations, PLH batteries offer long life design under extreme temperature ranges and fast charge performance.

GENERAL FEATURES

years

(25°C)

DESIGN LIFE

19-INCH OR 23-INCH IDEAL DIMENSIONS

Front terminal design makes PLH batteries ideal for 19-inch or 23-inch telecom cabinets



SHIELDED

True Pure Lead design and manufacturing offering Very Long Design Life in accordance to Eurobat (up to 20 years @ 20°C)

Shielded design terminal caps and patented anti-explosion one-way vent valve design to minimize water loss and increased safety



Pure Lead design makes PLH series ideal for high temperature applications



Thin plates using a special pasting formula ensures long service life

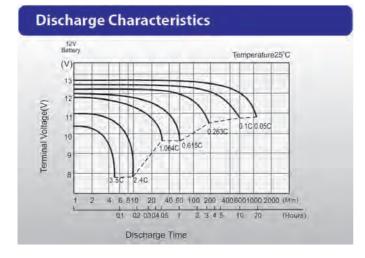


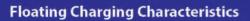
Premium ABS+PC jar & covers flame retardant to UL94-V0

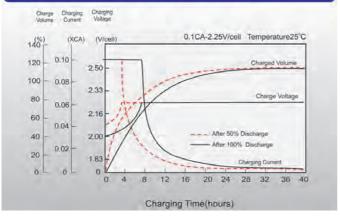
	Nominal	Rated Capacity			Appro	x. Dime	nsions				Approx.		
Model	el Voltage 10Hr@ (V) 1.80V/cell	Len	gth	Wid	Width		Height		leight	Weight		Terminal Type	
		(AH)	mm	in.	mm	in.	mm	in.	mm	in.	kg	lbs	
PLH40FT(A)	12	38	298.70	11.76	97.00	3.82	184.00	7.24	184.00	7.24	12.50	27.56	M6
PLH62FT(A)	12	62	298.70	11.76	97.00	3.82	267.00	10.51	267.00	10.51	19.50	42.99	M6
PLH90FT(A)	12	90	405.40	15.96	108.00	4.25	287.00	11.30	287.00	11.30	28.70	63.27	M6
PLH100FT(A)	12	100	405.40	15.96	108.00	4.25	287.00	11.30	287.00	11.30	30.80	67.90	M6
PLH110FT(A)	12	110	559.00	22.01	125.00	4.92	227.00	8.94	227.00	8.94	36.50	80.47	M6
PLH150FT(A)	12	150	559.00	22.01	125.00	4.92	277.00	10.91	277.00	10.91	48.00	105.82	M6
PLH170FT(A)	12	170	559.00	22.01	125.00	4.92	320.00	12.60	320.00	12.60	54.20	119.49	M6
PLH190FT(A)	12	190	559.00	22.01	125.00	4.92	320.00	12.60	320.00	12.60	57.60	126.98	M6
PLH210FT(A)	12	210	559.00	22.01	125.00	4.92	328.00	12.91	328.00	12.91	60.50	133.38	M6



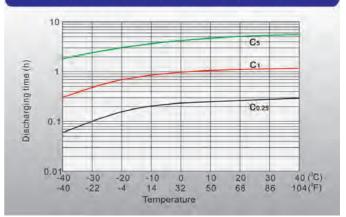
PERFORMANCE CHARACTERISTICS

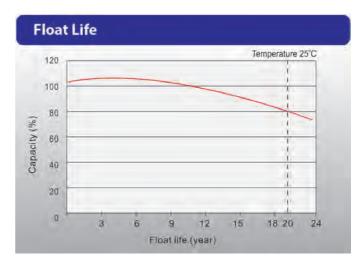




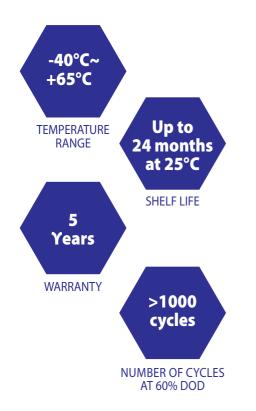


Temperature Effect on Discharging Time





Pure Lead Carbon High Endurance PLH+C series

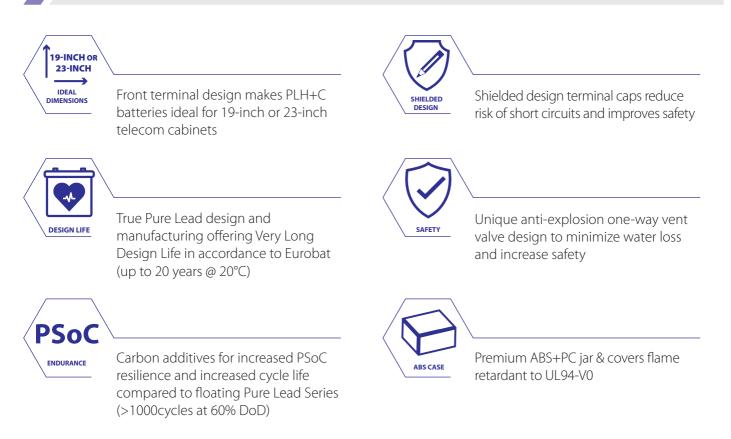


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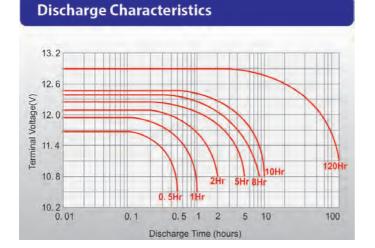
LEOCH Pure Lead Carbon Front Terminal batteries, PLH+C series, are AGM Valve-Regulated Lead-Acid front terminal batteries that have been optimized for hybrid telecom applications. Engineered for long life shallow cycling applications such as Hybrid and Renewable Energy powered Base Transceiver Stations. PLH+C batteries offer long life design and high cyclic performance.

GENERAL FEATURES



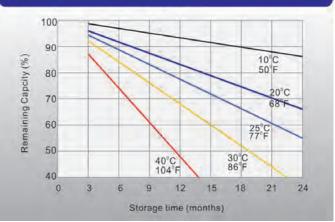
	Nominal	Rated Capacity			Appro		Approx.						
Model	odel Voltage 10Hr@ (V) 1.80V/cell		Len	gth	Wid	Width		Height		eight	Wei	ght	Terminal Type
		(AH)	mm	in.	mm	in.	mm	in.	mm	in.	kg	lbs	
PLH40FT(A)	12	38	298.70	11.76	97.00	3.82	184.00	7.24	184.00	7.24	12.50	27.56	M6
PLH62FT(A)	12	62	298.70	11.76	97.00	3.82	267.00	10.51	267.00	10.51	19.50	42.99	M6
PLH90FT(A)	12	90	405.40	15.96	108.00	4.25	287.00	11.30	287.00	11.30	28.70	63.27	M6
PLH100FT(A)	12	100	405.40	15.96	108.00	4.25	287.00	11.30	287.00	11.30	30.80	67.90	M6
PLH110FT(A)	12	110	559.00	22.01	125.00	4.92	227.00	8.94	227.00	8.94	36.50	80.47	M6
PLH150FT(A)	12	150	559.00	22.01	125.00	4.92	277.00	10.91	277.00	10.91	48.00	105.82	M6
PLH170FT(A)	12	170	559.00	22.01	125.00	4.92	320.00	12.60	320.00	12.60	54.20	119.49	M6
PLH190FT(A)	12	190	559.00	22.01	125.00	4.92	320.00	12.60	320.00	12.60	57.60	126.98	M6
PLH210FT(A)	12	210	559.00	22.01	125.00	4.92	328.00	12.91	328.00	12.91	60.50	133.38	M6

PERFORMANCE CHARACTERISTICS

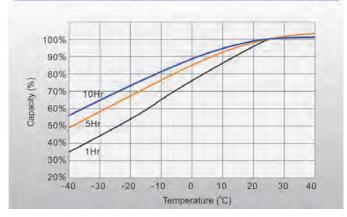


Cycle Life vs. Depth of Discharge life Cycle 0005 Cycle Depth of Discharge (%DOD)

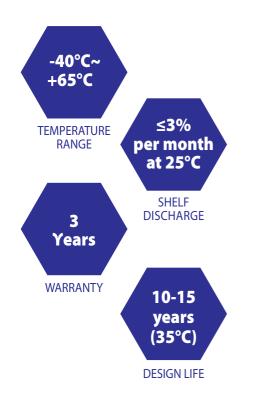
Self-discharge Characteristics



Temperature Effect in Relation to Battery Capacity



High Temperature LHT series





LEOCH High Temperature batteries, LHT series, are High Temperature AGM Valve-Regulated Lead-Acid batteries that have been optimized for high temperature telecom applications. Engineered for high temperature applications to reduce CAPEX & OPEX for the end-user, LHT(F) batteries offer a long life design at 35°C where conventional AGM batteries last half of the life duration of LHT(F) batteries, a front and top terminal design and extended warranty under high temperatures that offer "peace of mind" during usage.

GENERAL FEATURES



Ideal for high temperature communications and emergency power supply applications



High Temperature design paste formula, double sealing agent and separator to optimize performance under higher temperatures



To be operated at reference temperatures of 35°C, 10°C higher than the reference temperature of conventional VRLA batteries (25°C)



Long life design of up to 10 years (12V) and 15 years (2V) at 35℃



Unique anti-explosion one-way vent valve design to minimize water loss and increase safety

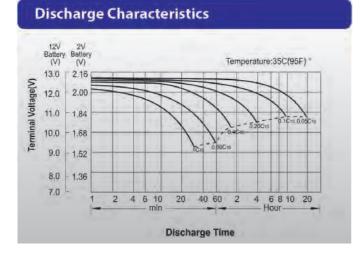


Premium ABS+PC jar & covers flame retardant to UL94-V0

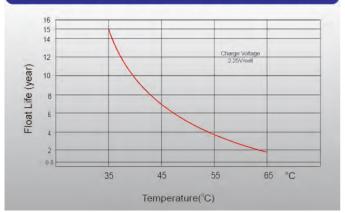
	Nominal	Rated Capacity			Appro	x. Dime	nsions				Арр	rox.	
Model	Voltage (V)	oltage 10Hr @	Len	gth	Wid	Width		Height		eight	Weight		Terminal Type
			mm	in.	mm	in.	mm	in.	mm	in.	kg	lbs	
LHT2-200	2	200	170.00	6.69	110.00	4.33	328.00	12.91	348.00	13.70	13.50	29.76	M8
LHT2-300	2	300	170.00	6.69	150.00	5.91	328.00	12.91	348.00	13.70	18.80	41.45	M8
LHT2-400	2	400	210.00	8.27	175.00	6.89	330.00	12.99	350.00	13.78	25.50	56.22	M8
LHT2-500	2	500	240.00	9.45	175.00	6.89	330.00	12.99	350.00	13.78	30.00	66.14	M8
LHT2-600	2	600	300.00	11.81	175.00	6.89	330.00	12.99	350.00	13.78	37.00	81.57	M8
LHT2-800	2	800	410.00	16.14	175.00	6.89	330.00	12.99	350.00	13.78	50.40	111.11	M8
LHT2-1000	2	1000	475.00	18.70	175.00	6.89	328.00	12.91	350.00	13.78	60.00	132.28	M8
LHT2-1500	2	1500	403.00	15.87	354.00	13.94	339.00	13.35	349.00	13.74	97.50	214.95	M8
LHT2-2000	2	2000	490.00	19.29	350.00	13.78	339.00	13.35	349.00	13.74	121.00	266.76	M8
LHT2-3000	2	3000	709.00	27.91	350.00	13.78	337.00	13.27	347.00	13.66	183.00	403.44	M8
LHT12-100	12	100	330.00	12.99	173.00	6.81	212.00	8.35	218.00	8.58	33.50	73.85	M8
LHT12-150	12	150	532.00	20.94	207.00	8.15	214.00	8.43	220.00	8.66	56.00	123.46	M8
LHT12-200	12	200	522.00	20.55	240.00	9.45	218.00	8.58	224.00	8.82	67.40	148.59	M8
LHTF12-100	12	100	394.00	15.51	110.00	4.33	286.00	11.26	286.00	11.26	31.50	69.44	M6
LHTF12-150	12	150	551.00	21.69	110.00	4.33	288.00	11.34	288.00	11.34	46.00	101.41	M6
LHTF12-200	12	200	560.00	22.05	126.00	4.96	320.00	12.60	320.00	12.60	59.500	131.17	M8

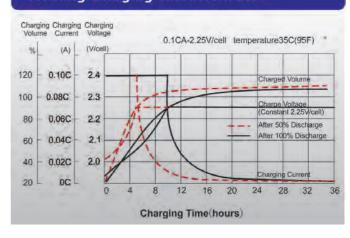


PERFORMANCE CHARACTERISTICS



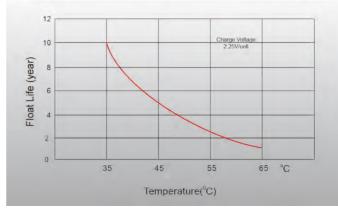
Temperature Effect on Long Term Float Life (2V)

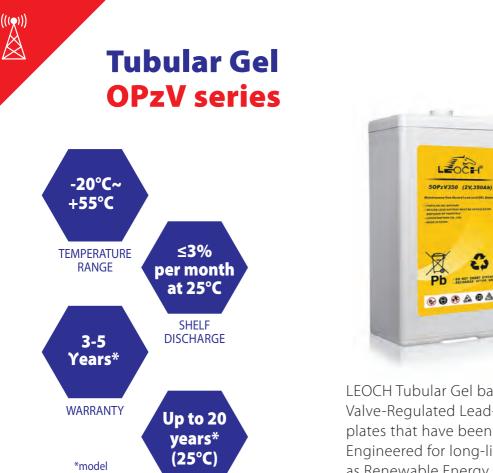




Floating Charging Characteristics

Temperature Effect on Long Term Float Life (12V)





LEOCH Tubular Gel batteries, OPzV series, are Gel Valve-Regulated Lead-Acid batteries using tubular plates that have been optimized for cyclic applications. Engineered for long-life cyclic applications such as Renewable Energy Stations, OPzV batteries are manufactured in a wide variety and offer up to 20-year life design with high cyclic abilities.

160PTV2000 (2V.2000Ah)

GENERAL FEATURES

DESIGN LIFE



dependent

Wide range including 2V cells, 12V top terminal and unique 12V front terminal blocks



For cyclic applications offering up to 2000 cycles at 60% DoD (2V) or up to 1600 cycles at 60% DoD (12V)



Design life of up to 20 years



Unique anti-explosion one-way vent valve design to minimize water loss and increase safety

MAINTENANCE

Complete maintenance free design throughout the battery's life (in accordance to the provided product and user's manual)



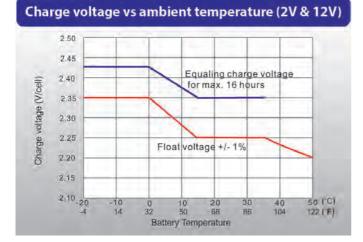
ABS case UL94-HB (UL94-V0 Optional) is used for increased container strength



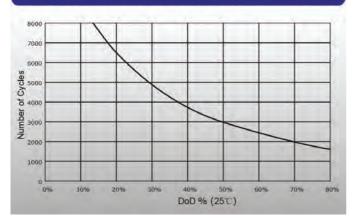
	Nominal	Rated Capacity			Appro		Approx.						
Model	Voltage (V)	10Hr @ 1.80V/cell	Len	Length		Width		Height		Total Height		Weight	
		(AH)	mm	in.	mm	in.	mm	in.	mm	in.	kg	lbs	Туре
4 OPzV200	2	200	103.00	4.06	206.00	8.11	355.00	13.98	390.00	15.35	18.80	41.50	M8
5 OPzV250	2	250	124.00	4.88	206.00	8.11	355.00	13.98	390.00	15.35	22.40	49.40	M8
6 OPzV300	2	300	145.00	5.71	206.00	8.11	355.00	13.98	390.00	15.35	26.40	58.20	M8
5 OPzV350	2	350	124.00	4.88	206.00	8.11	471.00	18.54	506.00	19.92	29.00	63.90	M8
6 OPzV420	2	420	145.00	5.71	206.00	8.11	471.00	18.54	506.00	19.92	34.50	76.10	M8
7 OPzV490	2	490	166.00	6.54	206.00	8.11	471.00	18.54	506.00	19.92	39.00	86.00	M8
6 OPzV600	2	600	145.00	5.71	206.00	8.11	646.00	25.43	681.00	26.81	48.00	105.80	M8
8 OPzV800	2	800	191.00	7.52	210.00	8.27	646.00	25.43	681.00	26.81	65.10	143.50	M8
10 OPzV1000	2	1000	233.00	9.17	210.00	8.27	646.00	25.43	681.00	26.81	78.50	173.10	M8
12 OPzV1200	2	1200	275.00	10.83	210.00	8.27	646.00	25.43	681.00	26.81	93.00	205.10	M8
12 OPzV1500	2	1500	275.00	10.83	210.00	8.27	796.00	31.34	831.00	32.72	115.00	253.60	M8
16 OPzV2000	2	2000	399.00	15.71	214.00	8.27	772.00	30.39	807.00	31.77	155.00	341.80	M8
20 OPzV2500	2	2500	487.00	19.17	212.00	8.34	772.00	30.39	807.00	31.77	196.00	432.20	M8
24 OPzV3000	2	3000	576.00	22.68	212.00	8.34	772.00	30.39	807.00	31.77	232.00	511.50	M8
12V3OPzV100FT	12	100	551.00	21.69	110.00	4.33	274.00	10.79	287.00	11.30	41.10	90.60	M6
12V10OPzV200	12	200	522.00	20.55	268.00	14.49	220.00	8.66	226.00	8.90	70.50	155.40	M8

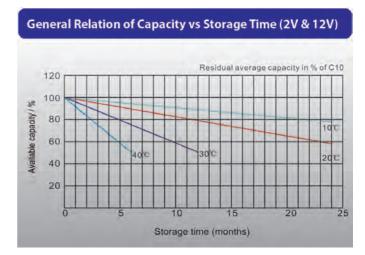


PERFORMANCE CHARACTERISTICS

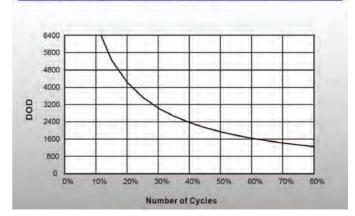


Cycle Life in Relation to DOD (2V)





Cycle Life in Relation to DOD (12V)



Li-lon 48V LFeLi series





Lithium-Ion batteries offer extreme cyclic abilities compared to lead-acid batteries. For extreme demanding telecom applications LEOCH has developed 48V Lithium-Ion (LiFePo₄) modules to replace front terminal 48V strings of lead acid batteries. Offering more than 5000 cycles at 60% DoD, 19-inch rack mounting design facilitate easy replacement in existing installations and easy maintenance.

GENERAL FEATURES



Environmentally friendly without any heavy metals inside



Lithium Ion Phosphate chemistry has a high thermal runaway threshold being one of the safest market lithium technology



Extreme Cycle Life, up to 3500 cycles at 100% DoD to reduce CAPEX & OPEX in demanding telecom, switchgear or hybrid applications



LCD screen available for on-site tool-free monitoring. Advanced BMS with a multitude of safety and communication options available.



Advanced BMS communication protocols (Modbus, Canbus, RS232, RS485) and bespoke solutions upon request (SNMP, Anti-Theft & Tracking Systems availability)



Passive cooling and electromagnetic shielded design

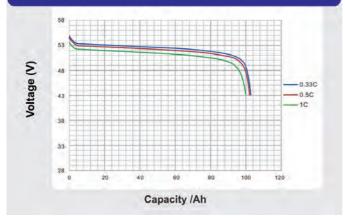


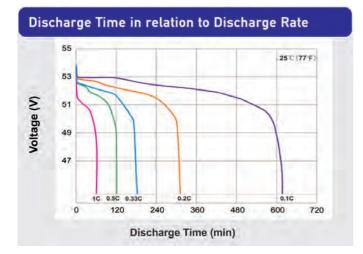
	Nominal Rated Capacit				Approx.	Dimens	ions	Approximate					
Model	Voltage (V)	10Hr @ 2.70V/cell	Len	gth	Wid	th	Heig	ght	Total H	leight	Wei	ght	Remarks
		(AH)	mm	in.	mm	in.	mm	in.	mm	in.	kg	lbs	
LFeLi-4810S	48V	10	442.00	17.40	290.00	11.42	44.00	1.73	44.00	1.73	9.50	20.94	No parallel conectivity available
LFeLi-4820S	48V	20	442.00	17.40	330.00	12.99	88.00	3.46	88.00	3.46	15.50	34.17	No parallel conectivity available
LFeLi-4850C	48V	50	443.00	17.40	442.00	17.40	132.00	5.20	132.00	5.20	32.00	70.55	Parallel conectivity available
LFeLi-4850T	48V	50	442.00	17.40	442.00	17.40	132.00	5.20	132.00	5.20	32.00	70.55	Parallel conectivity available
LFeLi-4875C	48V	75	440.00	17.40	399.00	15.71	177.00	6.97	177.00	6.97	42.00	92.59	Parallel conectivity available
LFeLi-48100F	48V	100	442.00	19.69	230.00	9.06	260.00	10.24	260.00	10.24	42.00	92.59	Parallel conectivity available
LFeLi-48100T	48V	100	500.00	17.40	431.00	16.97	177.50	6.99	177.50	6.99	43.00	94.80	Parallel conectivity available
LFeLi-48150T	48V	150	442.00	17.40	495.00	19.49	177.00	6.97	177.00	6.97	65.00	143.30	Parallel conectivity available
LFeLi-48200T	48V	200	442.00	17.40	560.00	22.05	244.00	9.61	244.00	9.61	82.00	180.78	Parallel conectivity available



PERFORMANCE CHARACTERISTICS

Discharge Capacity in relation to Discharge Rate

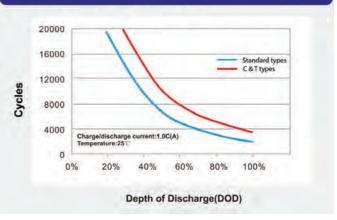




120 110 100 Capacity (%) 90 80 70 100%DOD and charge/discharge current: 0.2C(A) 60 50 -30 -20 -10 0 10 -20 30 40 50 60 70 Temperature (°C)

Temperature Effect in relation to Battery Capacity





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