

# Li-Ion 48V LFeLi series



**-20°C ~ +60°C**  
TEMPERATURE RANGE

**24 months**  
SHELF LIFE

**5 Years\***  
WARRANTY

**Up to 20 years\***  
DESIGN LIFE

\* depending on the application and the actual model

Lithium-Ion batteries offer extreme cyclic abilities compared to lead-acid batteries. For extreme demanding cyclic 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.

## GENERAL FEATURES

**ECO FRIENDLY**  
Environmentally friendly without any heavy metals inside

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

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

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

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

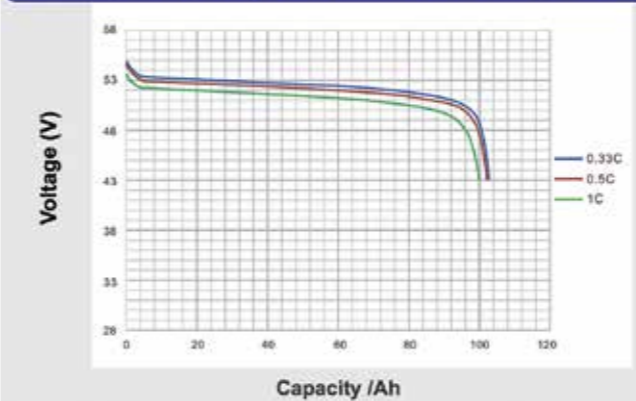
**SHIELDED DESIGN**  
Passive cooling and electromagnetic shielded design

## BATTERY SPECIFICATIONS

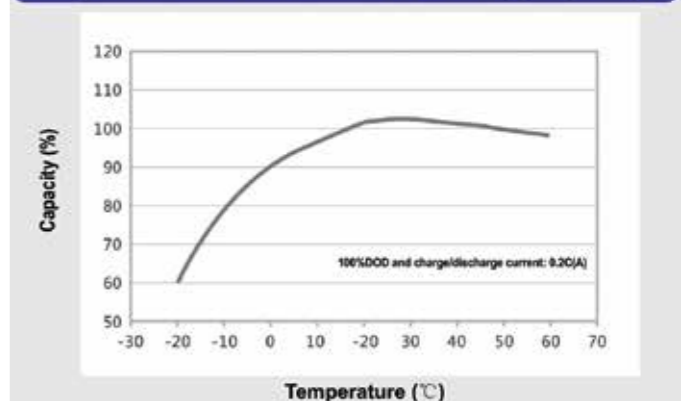
Model	Nominal Voltage (V)	Rated Capacity 10Hr @ 2.70V/cell (AH)	Approx. Dimensions								Approximate Weight		Remarks
			Length		Width		Height		Total Height		kg	lbs	
			mm	in.	mm	in.	mm	in.	mm	in.			
LFeLi-4810S	48V	10	442.00	174.02	290.00	114.17	44.00	17.32	44.00	17.32	9.50	20.94	No parallel connectivity available
LFeLi-4820S	48V	20	442.00	174.02	330.00	129.92	88.00	34.65	88.00	34.65	15.50	34.17	No parallel connectivity available
LFeLi-4850C	48V	50	442.00	174.02	442.00	174.02	132.00	51.97	132.00	51.97	32.00	70.55	Parallel connectivity available
LFeLi-4850T	48V	50	442.00	174.02	442.00	174.02	132.00	51.97	132.00	51.97	32.00	70.55	Parallel connectivity available
LFeLi-4875C	48V	75	442.00	174.02	399.00	157.09	177.00	69.69	177.00	69.69	42.00	92.59	Parallel connectivity available
LFeLi-48100	48V	100	442.00	174.02	450.00	177.17	132.00	51.97	132.00	51.97	41.00	90.39	Parallel connectivity available
LFeLi-48100F	48V	100	500.00	196.85	230.00	90.55	260.00	102.36	260.00	102.36	42.00	92.59	Parallel connectivity available
LFeLi-48100T	48V	100	442.00	174.02	450.00	177.17	177.00	69.69	177.00	69.69	43.00	94.80	Parallel connectivity available
LFeLi-48100E15	48V	100	442.00	174.02	450.00	177.17	132.00	51.97	132.00	51.97	43.00	94.80	Parallel connectivity available
LFeLi-48150T	48V	150	442.00	174.02	550.00	216.54	177.00	69.69	177.00	69.69	65.00	143.30	Parallel connectivity available
LFeLi-48200T	48V	200	442.00	174.02	520.00	204.72	244.00	96.06	244.00	96.06	82.00	180.78	Parallel connectivity available

## PERFORMANCE CHARACTERISTICS

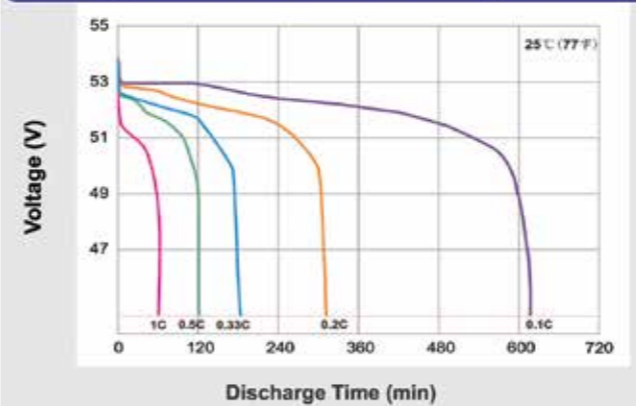
Discharge Capacity in relation to Discharge Rate



Temperature Effect in relation to Battery Capacity



Discharge Time in relation to Discharge Rate



Cycle Life Curve under different DOD and temperature conditions for system

