

"Disrupting the Uninterruptible Power Industry"

LR Series 1.5-6kVA UPS with External Batteries

# N1C UPS Power Lithium-Ion (LiFePO<sub>1</sub>)

Extra Long Runtime — 110-120V Single Phase



- 1.5, 2, 3 & 6 kVA UPS with up to 10x Lithium Ion EBMs
- Rack Mounted with Front and Rear Facing Options
- Life Cycle: 8,000 cycles at 77°F (25°C)
- 15-Year Battery Life Reduces Cost of Ownership
- More On Battery Runtime vs. Similar kVA Size Units
- Parallel 3kVA UPS for N+1 or up to 9kVA Capacity
- Parallel 6kVA UPS for N+1 or up to 36kVA Capacity
- Online Double Conversion Power Protection
- Eliminate UPS Battery Replacements
- 10-Year Replacement Warranty Included

## **KEY BENEFITS of Lithium-Ion**



High Power Density – Lithium-Ion batteries have over 5 times the energy and take up about 1/3 the space of a VRLA-based solution that delivers the same power. This means more power in the same or smaller footprint. More power also means longer backup run times for your critical loads!



Smaller Footprint – A smaller footprint translates to reduced cooling requirements, as well as about two-thirds reduction in weight. This offers the installation flexibility needed by many IT Departments.



Heat Tolerant – These lithium-ion batteries can handle working temperatures of up to 122°F. Where VRLA battery life is reduced by half for every 10°F over 71°F, Li-lon battery life is largely unaffected.



Life Span – The average life span of a VRLA battery is 3–5 years in ideal conditions. N1C Lithium–lon battery life is 10–15 years in nearly all conditions. Long life batteries reduce the burden and cost of down time and maintenance.



#### **Environmentally Friendly**

Other than the obvious — that Lithium lon batteries do not use lead — there are many other "green" benefits. Lithium—lon batteries require less charging time and power, need to be replaced less often, and use less energy to produce and transport.



N1 Critical Technologies, Inc. "Leaders In Lithium"

211 N. Parker Drive Janesville, WI 53545 855-208-0011 sales@n1critical.com lithium-ion-ups.com









## 1.5-6kVA Long Run Lithium-Ion UPS Systems





#### **UPS**

Weight - UPS (lbs)

17

17.5

32

33

МС	DDEL	N1C.LR1500	N1C.LR2000	N1C.LR3000	N1C.LR6000	
INPUT	Voltage (Vac)		110-120VAC		208-240VAC	
	Frequency (Hz)	50/60±5%				
	Power Factor	0.9		0.98		
OUTPUT	Capacity (VA/W)	1500/1350	2000/1800	3000/2940	6000/5880	
	Voltage (Vac)		110/120		208-240VAC	
	Frequency (Hz)	50/60±0.2% (battery mode)				
	Waveform	Pure Sine wave				
	Transfer Time	0 ms				
	Overload	100% to ≤110% Continuous 110% to ≤130% for 5min >130% for 2s 100% to ≤105% Continuous 105% to ≤125% for 1 125% to ≤150% for		5% for 10min		
	Input Connection*	5-15P	5-20P	Hardwire	Hardwire	
	NEMA Outlets	(8) 5-15R	(8) 5-15/20R	Hardwire	Hardwire	
BATTERY	Voltage (Vdc)	48Vdc				
	Run Time @ 100% / 50% Load Per 50Ah EBM (Estimated Minutes*)	50Ah EBM 180 @ 50% 92 @ 100%	50Ah EBM 138 @ 50% 69 @ 100%	50Ah EBM 79 @ 50% 31 @ 100%	50Ah EBM 38 @ 50% 13 @ 100%	
	Battery Capacity (Ah)	50Ah per EBM (*Note 100AH battery available as special order)				
	Charger Current (A) Max	4A standard (selectable amperage)		10A standard (selectable amperage)		
	Battery Life	10+ year design life (77°F) & 8000+ charge/discharge cycles				
	Communications	SNMP Network Card, EPO, Dry contact (optional)				
OTHER	Topology	Online Double Conversion				
	Alarm	Low battery, Abnormal AC input, UPS failure				
	Protection	Low battery, overload, short-circuit, over temperature				
	Working Temperature	32-122°F (UPS)				
	Relative Humidity	0~95%, No condensation				
	Dimensions - UPS Module (HxWxD in) **	3.4" (2U) x	17.2" x 16.5"	3.4" (2U) x 17.2" x 16.3"	5.2" (3U) x 17.2" x 16.3"	

### Battery

MODEL			N1C.L4850EBM2U	N1C.L48100EBM3U			
		Rating	48 Vdc / 50Ah	48 Vdc / 100Ah			
		Cell Type	Aluminum Case LFP cell				
	<b>A</b> L	Charge (V)	52.5-53.5Vdc				
		Discharge (V)	42Vdc				
ı	GENERAL	Charge Curr.	50A max (1C)	100A max (1C)			
ı	GEN	Dischg. Curr.	75A Continuous 100A Peak (2C)	150A Continuous 200A Peak (2C)			
١		Power Switch	2P power switch				
ı		Cycle Life	8,000 cycles at 77°F				
ı		Parallelable	Yes, up to 10 per UPS module				
۱	<b>PARAMETERS</b>	Resistance $\Omega$	<15m ohm				
d		Protection	BMS + Circuit Breaker				
ı		LED Display	Battery Status, Battery Level, Battery Fault, Alarms				
ı		Comms.	RS485 (RJ45) & extension port (RJ11)				
	SIZE	Dimensions (HxWxD in) **	3.5" (2U) x 17.2" x 24.8"	5.2" (3U) x 17.2" x 24.8"			
		Weight (lbs)	61.7	132.3			
	ENVIRONMENT	Operational Temperature	32°F to 122°F				
		Storage Temperature	-4-77°F for 18 months 77-113°F for ~3 months 113-140°F for ~1 month 68°F ± 5°F is the recommended storage temperature				
ı		Humidity	0-95%				

Specifications are subject to change without prior notice.

\*Runtime may vary based on conditions and age of battery.

\*\* Allow ~2" for wiring connections on back of UPS/Battery

Attuack is for reference palls Actual units may leak different

Artwork is for reference only. Actual units may look different. 1.5-3kVA UPS module and 50Ah EBM models depicted above.

