XTREME POWER CONVERSION **Li90 10kW-30kW**

10kW–30kW | 208/120VAC Three-Phase | Compact. Powerful. LFP Powered.



Advanced Lithium UPS for Demanding Environments

The Li90 is a compact, high-performance 208V three-phase online UPS that uses advanced Lithium Iron Phosphate ($LiFePO_4$) batteries, delivering up to three times the life of traditional VRLA systems. Its narrow footprint makes it ideal for tight installations in industrial, edge, and IT environments.

Designed for demanding applications, the Li90 uses three-level IGBT topology to deliver clean, efficient power in high-temperature conditions up to 50°C, holding input power factor at 0.99 or better with less than 3% THDi. Li90 is backed by a 5-year battery warranty and 2-year on-site UPS warranty, offering long-term reliability with lower maintenance costs.

For more three phase UPS solutions, reference the E91 at www.xpcc.com/E91

PRODUCT SNAPSHOT

- Available models: 10kW, 20kW, 30kW
- Unity power factor
- Lithium Iron Phosphate Battery Modules
- Approvals: UL1778, UN38.3, UL1973
- Startup and 2 Year on-site warranty (USA only)
- 5 year battery warranty (USA only)

FEATURES

Long-Life LFP Battery Modules — Up to 15 years of service and 3,000 to 5,000 discharge cycles. Hot-swappable with no system downtime.

Per-Module DC-DC Conversion — Each 57.6 VDC module feeds the 240 VDC bus through its own converter.

Slim Cabinet Design — Just 12.6" wide, ideal for edge, automation, and retrofit installations.

Touchscreen LCD Interface — 4.3" full-color display with single-line mimic and event logging.

High Overload Capacity — 110% for 60 minutes, 155% for 1 minute. Built for surges and startup loads.

Built-In Load Test — Verifies the UPS under load at commissioning. No rented load bank, no temporary cabling and breakers.

Maintenance Bypass — Integrated bypass allows safe, on-site service without shutdown.

Rugged Construction — Self-cleaning de-dust fans and conformal-coated PCBs for dusty, industrial, and high-humidity environments.

Flexible Input Options — Supports single or dual input (rectifier & bypass), pre-installed jumpers included.

Advanced Communication — 2 card slots, RS485 with Modbus, EPO, 1 input & 5 output dry contacts, optional SNMP

XTREME Power Conversion®

Protect your business.

MODEL SELECTION GUIDE

For more information, visit www.xpcc.com/Li90

MODEL NUMBER		Li90-10K	Li90-20K	Li90-30K
CAPACITY	Power rating	10kVA/10kW	20kVA/20kW	30kVA/30kW
INPUT	Voltage / Range	208/220 (3W+N+G) / 120V-156V linear derating, 156V-268V at full load		
	Frequency	40–70Hz		
OUTPUT	Voltage / Frequency	190/200/208/220±1% (L-L) ±1% (default is 208V) / 50/60±0.1 (battery mode)		
	Overload Capacity-Online Mode	<105% Continuous, <110% 60 min, <130% 10 min, <155% 1 min, <200% 200 ms		
	Efficiency	up to 94.5% online mode or 99% ECO mode		
INTERNAL BATTERY	Battery type	Lithium Iron Phosphate (LFP) Module		
	Modular Battery Capacity	50AH / 57.6V / 2880Wh		
	Battery Quantity	1 Module (1-3 Selectable)	2 Module (2-3 Selectable)	3 Modules
	Installed Energy	2.88 kWh (1 Module)	5.76 kWh (2 Modules)	8.64 kWh (3 Modules)
	Charge Current	2A - 40A Selectable (20A default)		
PHYSICAL	Dimensions (W x D x H)	12.6"W x 35.2"D x 49.2"H*		
	Enclosure Weight	207 lbs	227 lbs	242 lbs
	Battery Weight	81 lbs per module		
	Connection	Hardwired, terminal block		
ENVIRONMENT	Operating temperature	23F-122F (-5C-50C) Derates above 104F (40C)		
	Audible noise	<63dB (10, 20kW), <68dB (30kW)		
	Relative humidity	0 - 95% (non condensing)		
	Altitude	6,500 ft above sea level		
APPROVALS		UPS listed to UL 1778 · Battery modules to UL 1973 · UN 38.3 transport tested		
WARRANTY		5-year battery warranty**, 2-year on-site UPS warranty		
COMMUNICATIONS INTERFACE		RS485, EPO, Dry contact (1 input,5 output)+2 Slots+SNMP (optional)		
INCLUDED IN BOX		User manual		
AVAILABLE OPTIONS		External maintenance bypass		

**Add 3.9" to depth for terminal block cover. 5-year warranty is not applicable for installations where the ambient temperature exceeds 40°C (104°F). • **2-year battery warranty for installations where the ambient temperature exceeds 40°C (104°F) and is less than 50°C (122°F*

BATTERY RUNTIMES

	Internal Batteries					
Load:	5kW	10kW	15kW	20kW	25kW	30kW
1 Module (2.88 kWh)	29	15	-	-	-	-
2 Modules (5.76 kWh)	58	30	20	15	-	-
3 Modules (8.64 kWh)	87	45	30	22	18	15

Approximate runtimes are shown in minutes at 25°C. Values reflect measured efficiency at each load point and will vary with battery age and site conditions.

4.3" full-color touchscreen with single-line mimic diagram

Battery start button - starts the UPS from battery with no utility present

Hot-swappable $LiFePO_4$ battery modules provide up to 15 years of service life and enable easy maintenance without downtime

Each 57.6 VDC module has its own DC-DC converter to the 240 VDC bus



Li90 front view

RS485, EPO, and programmable dry contacts — 1 input, 5 output

Full breaker design — input, bypass, output, and maintenance breakers



Li90 rear view

XTREME Power Conversion®

Protect your business.

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