



# L3PH Series Uninterruptible Power Supplies **L3PH**

Operates incandescent, magnetic and electronic ballast fluorescent, high power factor compact fluorescent, and high intensity discharge (HID) lamp types.

Cabinet	Height	Width	Depth
Electronics Cabinet	55.1" (140 cm)	28.5" (72 cm)	28.7" (73 cm)
"A" Battery Cabinet	55.1" (140 cm)	17.7" (45 cm)	28.7" (73 cm)
"B" Battery Cabinet	55.1" (140 cm)	33.5" (85 cm)	28.7" (73 cm)
"C" Battery Cabinet	70.0" (178 cm)	34.0" (86 cm)	33.0" (84 cm)
"D" Battery Cabinet	70.0" (178 cm)	40.0" (102 cm)	33.0" (84 cm)

Unit		10 kVA	15 kVA	20 kVA	30 kVA	40 kVA	50 kVA
# of Battery Cabinets		1B	1C*	2B	2C	2D	3C
Electronics Cabinet	208V	880 lbs. (400 kg)	880 lbs. (400 kg)	880 lbs. (400 kg)	1,300 lbs. (590 kg)	1,507 lbs. (685 kg)	1,507 lbs. (685 kg)
	480V	1,030 lbs. (467 kg)	1,030 lbs. (467 kg)	1,030 lbs. (467 kg)	1,507 lbs. (685 kg)	1,507 lbs. (685 kg)	1,507 lbs. (685 kg)
Batteries		1,750 lbs. (793 kg)	2,400 lbs. (1,088 kg)	3,500 lbs. (1,587 kg)	4,850 lbs. (2,200 kg)	6,300 lbs. (2,855 kg)	8,640 lbs. (3,917 kg)
Battery Cabinet(s)		370 lbs. (168 kg)	550 lbs. (249 kg)	740 lbs. (336 kg)	1,050 lbs. (476 kg)	1,200 lbs. (544 kg)	2,360 lbs. (1,070 kg)
Total Weight	208V	3,000 lbs. (1,428 kg)	3,830 lbs. (1,737 kg)	5,120 lbs. (2,323 kg)	7,200 lbs. (3,264 kg)	9,007 lbs. (4,084 kg)	12,507 lbs. (5,672 kg)
	480V	3,150 lbs. (1,495 kg)	3,980 lbs. (1,805 kg)	5,270 lbs. (2,390 kg)	7,200 lbs. (3,264 kg)	9,007 lbs. (4,084 kg)	12,507 lbs. (5,672 kg)

### How to Specify:

**L3PH**

**SERIES**  
L3PH = Three Phase Uninterruptible Power Supplies

VA RATING

10 = 10,000  
5 = 15,000  
20 = 20,000  
30 = 30,000  
40 = 40,000  
50 = 50,000

INPUT/OUTPUT

2x2 = 208 3-phase 4 wire input and output  
4x4 = 480 3-phase 4 wire input and output  
4x2 = 480 3-phase 4 wire input and 280 3-phase 4 wire output

\* May also order 15 kVA unit with 1 "A" and 1 "B" battery cabinet.

### Overall Characteristics

- 208Y/120 VAC, 3 phase, 4 wire plus ground, input and output standard, optional voltages available
- 88% efficiency minimum
- Operating temperature range 18°F (-8°C) to 104°F (40°C)\*
- Internal maintenance by-pass is standard
- Main load disconnect switch standard
- Double conversion, no interruption
- Standard backup time of 90 minutes
- Output circuit breakers and normally-off loads optional
- Some modules are field upgradeable

### Housing

- Free standing, NEMA 1 enclosure with dead front panel
- Acid resistant powder coat finish
- Bottom access for conduit entries

### Metering/Controls

- A multilingual, alphanumeric display of two lines and 40 characters provides the following information:
  - Inverter voltage/frequency/current - DC volts/current
  - Reserve voltage/frequency/current - Battery volts/current
  - Load voltage/frequency/current - Load percentage/crest factor
- Computer interface using volt-free relay contacts configured for IBM AS/400, DEC, DG, PRIME, HP and similar computers
- RS232 port for direct two-way communication between the computer and UPS including the "EASY" graphics option
- Relay contacts to drive an optional remote alarm monitor
- Self-diagnostics/battery discharge test with user selectable battery test intervals

### Battery

Maintenance free, sealed lead calcium battery has an estimated service life of 5 years, and operating temperature range of 65°F (19°C) to 85°F (30°C).

### Electronics

#### Inverter

- Transient response ≤ 5%; Recovery time , 20 mS (100% load step)
- 3:1 crest factor capability
- Completely solid-state PWM inverter

### Electronics (continued)

- Inverter output distortion ≤ 8% THD (100% non-linear)
- Inverter output distortion ≤ 3% THD (linear loads)
- Output voltage regulation ±1% of nominal at full load
- Frequency: 60 Hz
- Inverter efficiency ≥ 90%
- Load power factor capability is 0.5 lagging to 0.9 leading
- K30 rated output power transformer
- Automatic low battery voltage disconnect (LVD)

#### Rectifier

- Input voltage range ±15% of nominal
- Full load walk-in from 25% to 100% of rated load in 10 seconds
- Voltage regulation ±1% maximum for input voltage and DC variations
- Ripple voltage < 2% rms voltage with inverter fully loaded and battery disconnected
- SCR controlled
- Rectifier efficiency ≥ 97.7%

#### Static Transfer Switch

- Overload rating 150% for 10 seconds
- Transfer time from inverter to utility is less than 0.5 mS

Job Information	Type:
<b>Job Name:</b>	
<b>Cat. No.:</b>	
<b>Lamp(s):</b>	
<b>Notes:</b>	

Lightolier a Genlyte Thomas Company www.lightolier.com  
 631 Airport Road, Fall River, MA 02720 • (508) 679-8131 • Fax (508) 674-4710  
 We reserve the right to change details of design, materials and finish.  
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### Options

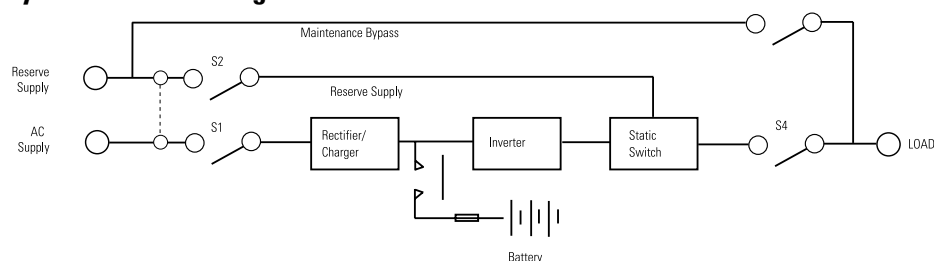
- SDS** = Special Documentation Set (consult factory)
- FSU** = Factory Start-up Service (required for warranty)
- ISO** = Input Isolation Transformer \*
- IHF** = 10% Input harmonic Filter
- RAU** = Remote Alarm Unit
- ESP** = EASY Software Package
- CIC** = Computer Interface Cable
- NOL** = Normally Off Load (Non-HID applications only)
- OCB(#)** = Output Circuit Breakers (specify quantity)

MODEL	CAPACITY	INPUT		OUTPUT		
		AC INPUT VOLTAGES	INPUT AMPS		MAX. LOAD AMPS PER PHASE	
			Continuous	Maximum	120 V	277 V
<b>L3PH10</b>	10,000 VA	208Y/120	32	42	28	N/A
		480Y/277	15	19	N/A	12
<b>L3PH15</b>	15,000 VA	208Y/120	48	60	42	N/A
		480Y/277	22	27	N/A	18
<b>L3PH20</b>	20,000 VA	208Y/120	64	78	56	N/A
		480Y/277	29	35	N/A	24
<b>L3PH30</b>	30,000 VA	208Y/120	95	118	83	N/A
		480Y/277	41	51	N/A	36
<b>L3PH40</b>	40,000 VA	208Y/120	126	158	111	N/A
		480Y/277	55	68	N/A	48
<b>L3PH50</b>	50,000 VA	208Y/120	156	197	139	N/A
		480Y/277	68	86	N/A	60

### Warranty

Warranty is for 12 months parts: labor and travel also covered if Factory Start-Up Service (FSU) option is purchased.

### System One-Line Diagram



### Computer Interface Pin Configuration (AS/400™)

Pin	Description	Function
8	Normal	System Functioning Normally
6	Load On Reserve	Double Conversion Inverter Not Operating
9	Power Failure	Load Supplied by Battery
7	End of Discharge Period	Unit Will Soon Stop Operating
5	Common	Common Connection to Above 4 Signals



Listed to UL 924

### Job Information Type:

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