

Туре No	
Job Name _	
Catalog No.	



# Centaurus Linebacker



> 300-600 Watts, Sine Wave Fast Transfer Power Supply for **Emergency Lighting Applications** 







Shown: LB600

# Housing

- Free standing, NEMA 1 enclosure, durable powder coat finish
- Multiple conduit entries
- · Refer to chart on back for dimensions

## **Overall Characteristics**

- 98% throughput efficiency
- · Single conversion UPS, 1ms transfer time
- Operating temperature range of 68°F (20°C) to 85°F (30°C) for
- Standard 90 minutes minimum of operating time at full load
- · Pulse width modulated (PWM) design
- The Centaurus Linebacker meets the Buy American requirements

# **Application**

- Operates incandescent, electronic ballast loads, HID, and LED lighting loads as well as critical loads requiring conditioned emergency power
- · A versatile emergency power source option that can be located outside of critical spaces such as hazardous locations, extreme environments, or aesthetically sensitive areas
- For operation with LED loads, it is critical to understand the in-rush characteristics of the LED luminaire so as not to blow the output fusing in the inverter
- · Additionally, it is important to understand the LED luminaire input characteristics with respect to true power versus apparent power so as not to overload the inverter and not achieve the required 90-minute run time

# **Electronics - Input**

- 120 or 277 VAC
- Frequency 60.0 Hz ± 2.0%
- Input Voltage Tolerance ±10%
- · Input circuit breaker is a standard feature to simplify maintenance

## **Electronics - Output**

- · Solid state PWM inverter with sine wave output
- Output distortion <3% THD (linear load)
- · Output fusing standard, output circuit breakers optional
- Output frequency 60 Hz ± 2 Hz
- · Load power factor capability is 0.5 lagging to 0.5 leading
- · Overload rating: 150% for 5 seconds
- Efficiency: 98%

# Charger

- Low voltage disconnect (LVD)
- · Fully automatic, temperature compensated, solid-state charging
- · Recharge time: UL 924 compliant
- · Battery circuit breaker

## **Standard Metering/Controls**

- · AC input breaker
- AC output fuse
- · Battery disconnect breaker
- · LED indicating lamps for system on utility, system on inverter, overload condition, no load connected

#### **Battery**

- · Maintenance free, sealed lead calcium battery with an optimum operating range of 68°F (20°C) to 85°F (30°C)\*
- \* Increases or decreases in temperature will affect battery performance. Optimum battery performance realized at 77°F (25°C). Batteries are rated at 100% capacity at 77°F (25°C).

#### Warranty

- · Electronics: 3 years full
- · Battery: 1 year full, 4 years pro-rata
- Extended warranty options available



# **Ordering Information**

## FACTORY INSTALLED OPTIONAL CIRCUIT BREAKER

LB					
SERIES	OUTPUT WATTAGE	VOLTAGE CONFIGURATION	OUTPUT CIRCUIT BREAKERS	OUTPUT CIRCUIT BREAKER VOLTAGE*	OUTPUT CIRCUIT BREAKER RATING
<b>LB</b> = Centaurus Linebacker	300 = 330 VA / 300 W 400 = 660 VA / 400 W 600 = 660 VA / 600 W	120 = 120 V 277 = 277 V	1 = OCB1 2 = OCB2	<b>A</b> = 120 VAC <b>R</b> = 277 VAC	10 = 10 A 15 = 15 A 20 = 20 A

<sup>\*</sup> Output circuit breaker voltage must match the system input voltage.

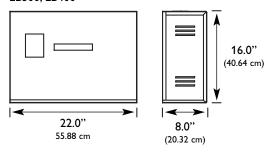
# **System Input/Output Ratings**

MODEL	CAPACITY	INPUT (select one)	
		AC INPUT VOLTAGES	INPUT AMPS <sup>1</sup>
LB300	300 W	120:277	3.1:1.4
LB400	400 W	120:277	5.8:2.6
LB600	600 W	120:277	6.2:2.8

NOTES: 1) Maximum input current

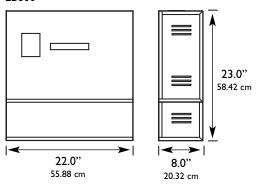
# **Dimensions/Weights**

## LB300, LB400



	300 W	400 W	600 W
Cabinet &	113 lbs.	132 lbs.	188 lbs.
Batteries	(51.26 kg)	(59.87 kg)	(85.28 kg)

## LB600



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE







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## Centaurus Linebacker, 300-600 W

## **Suggested Specification**

Furnish and install LightGuard's Emergency Lighting System known as Centaurus Linebacker with a capacity rating of \_\_\_\_\_\_ W for a minimum of 90 minutes. The system shall produce a sine wave output, and shall be UL listed to Underwriters Laboratories standard 924 and FCC Class A compliant.

Equipment and accessories furnished under the terms of this specification shall be the standard product of a single manufacturer and shall be equal in all respects to those supplied by LightGuard. Catalog numbers and model designations which appear herein indicate design, quality and the type of material as well as required operating characteristics. All equipment shall be in compliance with the applicable UL standards, local and national codes.

The connected load shall be powered normally by utility through the Linebacker Inverter and upon failure of the utility input, the load shall automatically continue to be powered via the Centaurus Linebacker system's battery and inverter for a minimum of 1.5 hours. Upon restoration of utility power, the inverter will automatically reconnect the load to the utility power.

The Centaurus Linebacker system shall be capable of powering any combination of fluorescent ballasted lamps, HID, incandescent lamps or other approved loads up to the total rating of the system. The system shall automatically protect itself against damage from overloads and short circuits while powered from either utility AC or during emergency inverter operation.

The Centaurus Linebacker system shall automatically revert to emergency inverter operation should the average utility AC voltage fall below 80% of nominal line voltage. The system shall use no relays or other moving parts in the main inverter or battery charger circuitry. The power inverter shall be off except during a power failure.

Under inverter emergency operations, output voltage shall be within  $\pm 2\%$  of nominal at full static load for the specified discharge period; and the frequency shall be 60.0 Hz  $\pm$  2 Hz.

During inverter emergency operation, the system efficiency shall not be less than 80%. The AC output to the load shall be isolated from the utility input during inverter emergency operation.

The LightGuard Linebacker inverter battery charger shall be completely automatic, transistor controlled with a programmed reference, and capable of restoring the battery to capacity within UL 924 requirements after restoration of utility power. The charger power shall be obtained from the main power, via independent transformer. The charger efficiency shall not be less than 90%. The charger shall be all solid state, and shall automatically maintain the battery in the fully charged condition whenever the utility power is available.

Under emergency mode conditions, the Centaurus Linebacker Inverter shall be powered by sealed, maintenance-free recombination batteries. The sealed lead calcium battery shall be encased in a high impact, heat resistant, plastic container with a permanently sealed cover. The battery shall operate entirely unattended and require no addition of water for a period of 10 years.

A low voltage disconnect circuit designed to reduce battery discharge during extended power outages, shall monitor the battery voltage and disconnect the inverter when battery voltage drops to approximately 85% of nominal battery voltage.

System metering and controls shall consist of AC input, output and load status indicator lamps. AC input breaker, battery circuit breaker and push to test switch are included.

#### **Unit Check List**

Catalog No.	Wattage Rating:
Battery Type: Sealed Lead Calci	um Operating Time Hrs. 1 Min. 30
Input:VAC; Single	Phase; # of Wires 2
Output:VAC; Single	Phase; # of Wires 2
Output Circuit Breakers:	
(1) AC Volts*:	Amps:
(2) AC Volts*:	Amps:
*Output breakers must be same voltage	
Remarks:	



