

Type No. _____
Job Name _____
Catalog No. _____



Listed to
UL 924

Centaurus LG2 Series

1500VA Single Phase Uninterruptible Power Supplies (UPS) for Emergency Lighting Applications

Electronics

Overall

- Operating temperature range 32°F (0°C) to 104°F (40°C)*
- Audible noise less than 50dB at 3 ft on "A" weighted scale
- Automatic low battery voltage disconnect

Output

- Sine wave output
- Voltage regulation $\pm 2\%$
- Frequency regulation - Synchronized to utility
Free running 60Hz, $\pm 0.5\%$
- Output voltage distortion maximum 3%THD with linear load
- Load power factor capability 0.7 lead to 0.7 lag
- Overload capability 150% for 1 minute with utility power source present

Input

- Input power factor correcting to 0.97
- Frequency range 60Hz, $\pm 2.5\text{Hz}$
- Input harmonic current distortion $< 5\%$ THD
- IEEE 587 ANSI C 62.41-1980 surge suppression

*Optimum operating temperature of batteries is 77°F (25°C).
Temperatures above 85°F (30°C) adversely impact battery life

Warranty

Standard Warranty

- Electronics warranty is 12 months from date of shipment.
Battery warranty is 1 year full, 9 years pro-rata from date of shipment.

Extended Warranty Available

- Consult factory for extended warranty and service option.

Features

- Double conversion- no interruption
- Solid state Pulse Width Modulated inverter
- Internal inverter by-pass switch
- Standard, UL 924 compliant, 90 minute battery back up
- UL 924 auxiliary equipment 10 and 20 minute back up available
- Microprocessor control and diagnostic system
- LED array system status panel
- Fault annunciating audible alarm
- Current limiting start sequence
- Single output circuit breaker is standard. Additional circuit breakers (OCB) or circuit breakers with trip alarms (OCBA) can be added
- Optional normally off load (NOL) energizes only during power outage, is user programmable from 0-15 minutes
- Free standing NEMA1 enclosure
- Lockable control access panel
- Seismic anchoring compatible

Applications

- The solid state Pulse Width Modulated (PWM) inverter offers enhanced load compatibility
- It operates incandescent, magnetic and electronic ballast fluorescent, high power factor compact fluorescent and high intensity discharge (HID) luminaries
- Provides conditioned, uninterruptible power for other types of critical loads. Consult factory for non-lighting load applications.

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Centaurus LG2 Series, 1500VA

Suggested Specification

Furnish and install LightGuard's single phase Emergency Lighting System known as Centaurus LG2 Series. The system shall be UL listed to Underwriters Laboratories standard 924.

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.

The connected load shall be continuously powered by the filtered power of the double conversion Centaurus LG2 system and upon failure of the utility input, the load shall automatically continue to be powered via the Centaurus LG2 system's battery and inverter for the specified time. Upon restoration of utility power, the system will automatically resume supplying the load with double conversion, filtered power. The system input factor shall be corrected to 0.97 or greater.

The Centaurus LG2 Series shall be capable of powering any combination of fluorescent ballasted lamps, incandescent lamps, electronic and high power factor compact fluorescent ballasts, HID 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. It shall automatically recover from such overloads and clear short circuits by means of overcurrent protection devices.

Under emergency operations, the microprocessor shall regulate the output voltage within $\pm 2\%$ of nominal at full load for the specified discharge period; and the frequency shall be within $\pm 0.5\%$.

The system shall use redundant fans in the cooling of the electronic compartment. The AC output to the load shall be isolated from the utility input during inverter emergency operation.

Under emergency mode conditions, the Centaurus LG2 shall be powered by maintenance free, sealed lead calcium batteries. The battery shall operate entirely unattended and require no addition of water for a period of 10 years or longer. Periodic inspection of batteries is recommended.

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 voltage. Restoration of utility power following a low voltage disconnect event shall automatically re-start the Centaurus LG2.

The Centaurus LG2 solid state battery charger shall be completely automatic with a programmed reference, and capable of restoring the battery to capacity within UL 924 requirements. The charger shall have capability to recharge a battery of up to 4 hour discharge capacity and shall automatically maintain the battery in the fully charged condition whenever the utility power is available.

System display shall indicate normal, caution and alarm conditions. Dry contact for remote failure alarm, and a DB9 computer style connector shall provide volt free contacts for remote alarm indication.

Unit Check List

Catalog No. _____		VA Rating: <u>1500</u>	
Battery Type: Sealed Lead Calcium		Operating Time: 90 / 20 / 10 Min.	
Utility Input: _____ VAC; Single Phase			
Output Circuit Breakers:			
Qty: _____	AC Volts: _____	Amps: _____	Normally ON <input type="checkbox"/>
Qty: _____	AC Volts: _____	Amps: _____	Normally OFF <input type="checkbox"/>
Qty: _____	AC Volts: _____	Amps: _____	Trip Alarm YES <input type="checkbox"/> NO <input type="checkbox"/>
Qty: _____	AC Volts: _____	Amps: _____	Trip Alarm YES <input type="checkbox"/> NO <input type="checkbox"/>
Qty: _____	AC Volts: _____	Amps: _____	Trip Alarm YES <input type="checkbox"/> NO <input type="checkbox"/>
REMARKS: _____			



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