| Type No | |
|-------------|--|
| Job Name . | |
| Catalog No. | |





Listed to UL 924 and UL 924

Electronics

Shown: LMUPS550B

Input

- Input power factor self-correcting to > 0.95
- Frequency 60.0 Hz \pm 2.5 Hz
- Input Voltage Tolerance +10% to -15%
- Input harmonics < 8% THD

Output

- · Solid state PWM inverter with sine wave output
- Output voltage regulation ±3% of nominal at full load
- Output frequency 60 Hz ± 0.2%
- Load power factor capability is 0.6 lagging to unity
- Overload rating: 125% for 10 minutes
- Efficiency: 82% to 86%

Charger

- Low voltage disconnect (LVD)
- 3 Amp, 2-Stage
- Recharge time: UL 924 compliant

Battery

- Maintenance free, sealed lead calcium battery with an expected life up to 10 years, and optimum operating range of 65°F (19°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: 1 year

Battery: 1 year full, 9 years pro-rata Extended warranty options available

Centaurus IV LM-UPS

550 - 1,500 VA, Sine Wave

Uninterruptible Power Supply for Emergency Lighting Applications

Auxiliary Equipment Overall Characteristics

- 83% throughput efficiency
- · Single conversion UPS, No transfer time
- Operating temperature range of 32°F (0°C) to 104°F (40°C); 65°F (19°C) to 85°F (30°C) for batteries
- Standard 90 minutes of operating time, 10 and 20 minute operating times available
- Full-time, isolating transformer
- · Variable Range Regulator allows wider range of acceptable input voltage variation
- ANSI/IEEE C62.41 category A & B surge voltage withstand capability

Application

· Operates incandescent, electronic ballast fluorescent loads and HID lighting loads as well as critical loads requiring conditioned emergency power

Housing

- Free standing, NEMA 1 enclosure with locking doors
- · Acid resistant powder coat finish
- · Multiple conduit entries
- · Refer to dimension chart on back for sizes

Standard Metering/Controls

- DC battery voltmeter
- · AC input breaker
- · AC output breaker
- Battery disconnect device
- Automatic battery monitor with alarm
- LED indicating lamps for system on utility, system on battery, low battery warning



Centaurus IV LM-UPS, 550 - 1,500 VA

System Input/Output Ratings

| MODEL | CAPACITY | INPUT (S AC INPUT VOLTAGES | elect One) INPUT AMPS ¹ | OUTPUT (Select One) AVAILABLE OUTPUT VOLTAGES/ MAX. LOAD AMPS ² | | BREAKERS Included | HEAT REJECTION (Btu/hr) |
|-----------|----------|----------------------------------|--|--|------------------|----------------------|-------------------------------|
| LMUPS550 | 550 VA | 120 277 | 6.5 2.8 | 120 V 4.6 | 277 V 2.0 | 1 1 | 410 |
| LMUPS1000 | 1,000 VA | 120 277 | 11.5 5.0 | 8.3 | 3.6 | 3 3 | 545 |
| LMUPS1500 | 1,500 VA | 120 277 | 17.2 7.4 | 12.5 | 5.4 | 3 3 | 615 |

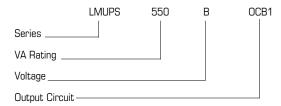
NOTES: 1) Maximum input current

Ordering Information

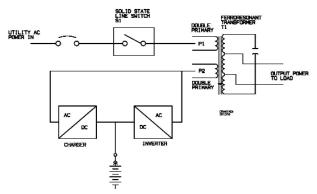
| SERIES | VA RATING | V | DLTAGE | OUTPUT CIRCUIT BREAKERS | OPTIONS |
|-------------------------|--------------|---------|--------|-------------------------------|---|
| LightGuard Centaurus IV | 550 = 550 | Input | Output | OCB1 = (550 VA) | FSU = Factory Start-up Service |
| LM-UPS Uninterruptible | 1000 = 1,000 | A = 120 | 120 | OCB3 = (1000, 1500 VA) | EXT = Extended Warranty ¹ |
| Power Supply For | 1500 = 1,500 | B = 277 | 277 | | |
| Emergency Lighting | | | | | |
| Applications | | | | | |
| LMUPS = 90 Min. Backup | | | | | |
| LMUPSX = 10 Min. Backup | | | | | |
| LMUPSY = 20 Min. Backup | | | | | |
| | | | | | |
| | | | | | |

 $\underline{\text{NOTES:}}$ 1) EXT option only available with FSU

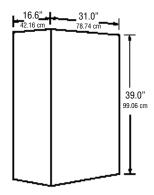
Ordering Example



System One-Line Diagram



Dimensions/Weights



| | 550 VA | 1000 VA | 1500 VA |
|----------------------------------|-----------------------|---------------------|----------------------|
| Cabinet & | 223 lbs. | 223 lbs. | 262 lbs. |
| Electronics | (101 kg) | (101 kg) | (119 kg) |
| Sealed Lead Calcium Batteries | | | |
| 90 Min. Backup | 121 lbs. (60.5 kg) | 203 lbs. (92 kg) | 288 lbs. (131 kg) |
| 10 Min. Backup | 44 lbs. | 59 lbs | 88 lbs |
| | (97 kg) | (119 kg) | (194 kg) |
| 20 Min. Backup | 54 lbs. | 88 lbs. | 108 lbs |
| | (119 kg) | (194 kg) | (238 kg) |

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE





| Type No | |
|-------------|--|
| Job Name . | |
| Catalog No. | |



Centaurus IV LM-UPS, 500 - 1,500 VA

Suggested Specification

Furnish and install LightGuard's Emergency Lighting System known as Under inverter emergency operations, output voltage shall be within Centaurus LM-UPS () Series with a VA rating of The system shall be sine wave output, and shall be UL listed to Underwriters Laboratories standard 924 and FCC Class A certified.

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 powered normally by conditioned utility through the on-line isolating transformer and upon failure of the utility input, the load shall automatically continue to be powered via the Centaurus LM-UPS () system's battery and inverter for a minimum of 1.5 hours (alt. run time). Upon restoration of utility power, the inverter will automatically reconnect the load to the utility power.

The Centaurus LM-UPS () 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 LM-UPS () 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.

±3% of nominal at full load for the specified discharge period, and the frequency shall be 60.0 Hz ±2.5 Hz%.

During inverter emergency operation, the system efficiency shall not be less than 80%. The system shall use mechanical fans in the electronic circuit compartment. The AC output to the load shall be isolated from the utility input during inverter emergency operation.

The LightGuard battery charger shall be completely automatic, transistor controlled with a programmed reference, and capable of restoring the battery to capacity within UL924 requirements after restoration of utility power. The charger power shall be obtained from the main power, without the use of separate transformers. 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 LM-UPS () Inverter shall be powered by sealed, 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 voltage.

System metering and controls shall consist of AC input and output voltage, AC input pilot light, battery disconnect device, automatic battery condition monitor with failure alarm, and RS232 server port.

Unit Check List

| Battery Tyl | o pe: Sealed L VAC; <u>S</u> VAC; <u>S</u> | ead Calcium Single Phase; | | Min | |
|-------------|---|------------------------------|----------------|----------------------------|--|
| (1) | rcuit Breakers: 550 VA: 1000, 1500 VA: | | Amps: Amps: | Normally On Normally On | |
| Options: | FSU | EXT | | | |
| REMARKS |): | | | | |



