

600 W — 2 kW SINGLE PHASE

UltraLITE MODEL ELC

Compact, Centralized Emergency Lighting Inverters

Featuring one of the smallest cabinet
footprints in the industry.

True no-break system, with regulated output and transient voltage protection for LED lighting, electronic ballasts, as well as all other existing and future lighting applications.

Meets NFPA 101, 111, NEC, IBC and local codes.

Applications:

- Schools / Universities / Dormitories
- Arenas / Stadiums
- Parking Structures / Garages
- Hospitals / Clinics
- Office Buildings
- Shopping Malls
- Hotels / Motels
- Apartment Buildings
- Correctional Facilities
- Worship Facilities



UL / C-UL 924



CONTROLLED POWER COMPANY



FEATURES & SPECIFICATIONS

Controlled Power Company engineers and manufactures the industry's highest quality **centralized emergency lighting inverters**, capitalizing on 40 years of expertise. We have an enviable reputation for quality, which is reflected in the design, workmanship, and performance of our products.

The inverter technology in our **UltraLITE, Model ELC** effectively maintains critical equipment with extended brownout protection, tight voltage regulation, and power conditioning. Tight voltage regulation assures that facility egress lumens are maintained 100% at emergency lighting fixtures, in all modes of operation, and also extends ballast and lamp life.

Features & Benefits

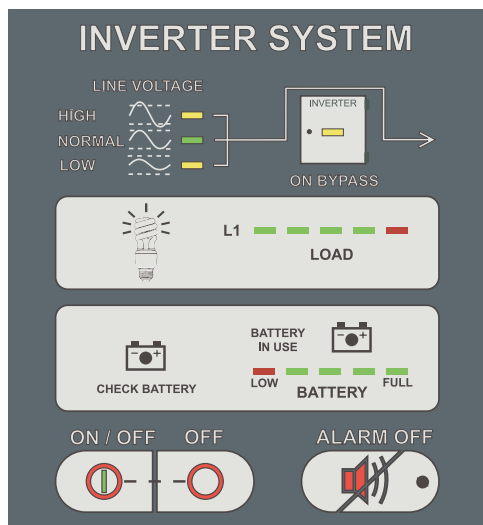
- Uninterrupted, regulated, continuous sinewave output for use with “normally on” lighting fixtures and exit lamps, HID compatible.
- Standby output for use with “normally off” emergency lighting fixtures.
- **Timed Normally Off Bus “PLUS”** option includes an adjustable soft start to accommodate the high inrush current of “normally off” emergency lights, regardless of type or manufacturer.
- True, online double-conversion topology provides conditioned, regulated power and 100% reliability to emergency lighting loads.
- High-speed automatic static bypass.
- Manual bypass switch.
- Advanced DSP control used for enhanced performance, accuracy, and system reliability.
- Compact, front access design, featuring **one of the smallest cabinet footprints in the industry.**
- Standard NEMA 2 drip-proof enclosure.
- Generator-compatible.
- Inverter electronics designed for use at 0° to 40° C.
- 4-stage, temperature-compensated battery charger for increased battery life.
- An industry-leading battery recharge time of 24 hours or better.

Product Specifications

- Input Operating Voltage Range: +12%, -30% typical, load-dependent, without battery usage; +12%, -15% at full load
- Input Frequency: 60 Hz, $\pm 2.5\%$
- Input Current Harmonic Distortion: < 5% THD
- Input Power Factor Correction: > .97 pF at full load
- Output Sine Wave Voltage: Typically 3% output THD with linear load
- Output Regulation: Typically better than $\pm 2\%$
- One (1) output circuit breaker included for the “Normally On” bus and/or the “Timed Normally Off” bus. (See optional **Output Distribution Circuit Breakers** on Page 3.)
- Operating Temperature: UL 924 with 90 minutes runtime (20° to 35° C); UL 924 with other runtimes (0° to 40° C); C-UL 924 with 30 minutes runtime (10° to 40° C). Optimum battery performance and life at 25° C.
- Battery Time: UL 924 Listed 90 minutes at full-rated kW output, or with optional run times from 15 minutes to 4 hours, C-UL 924 Listed with 30 minutes run time.

Safety

- UL 924 Emergency Lighting Equipment
- UL 924 Auxilliary Lighting and Power Equipment
- C-UL 924 Listed to CSA Standard C22.2 No. 141-02 Equipment for Emergency Lighting
- NFPA 101, NFPA 111, NEC, and local codes



For illustration purposes, all LEDs are illuminated.

Display Monitor & Diagnostics

The **Model ELCs** full-featured monitoring system includes:

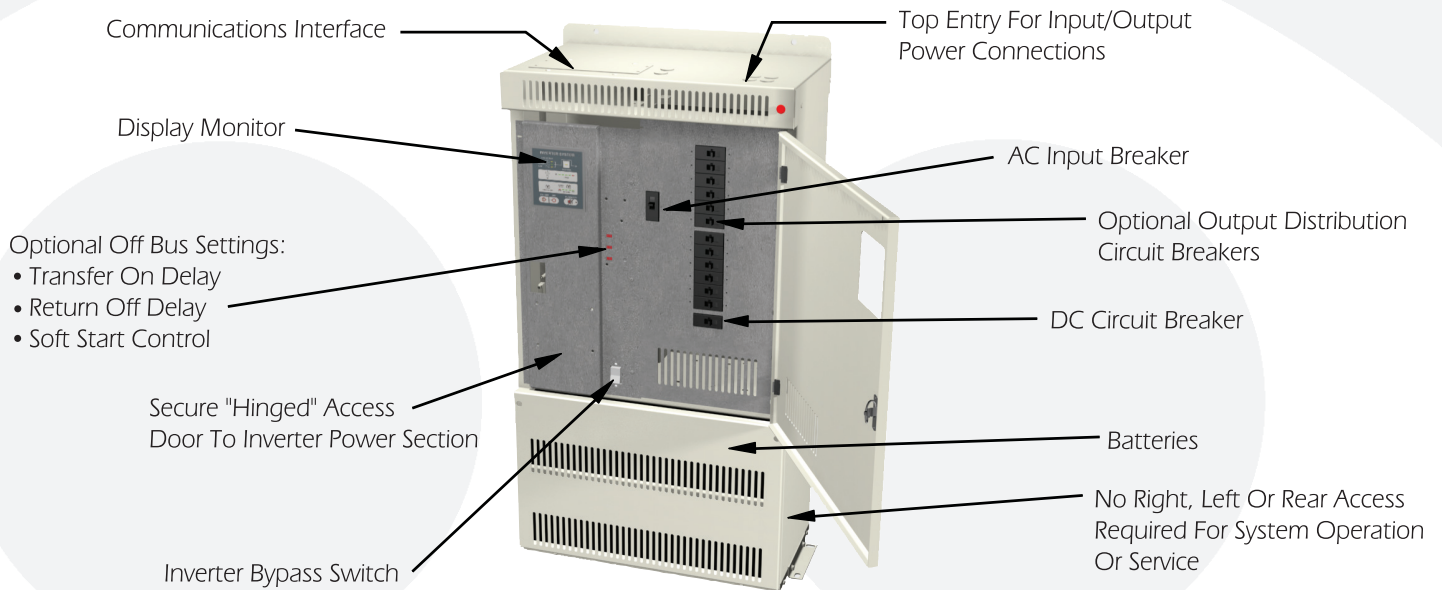
- Self-Test Diagnostics
- Automatic Battery Test
- Audible Alarms
- Protected ON / OFF Switch
- Push-To-Test

The **ELC** also has a full complement of status indicators:

- Percent Load
- High / Low / Normal Input Voltage
- On Battery
- Percent Of Battery
- Check Battery
- Bypass Status
- Alarm Status

ELC ADVANTAGES, COMMUNICATIONS & OPTIONS

Advantages of the "UltraLITE, Model ELC"



NFPA-Compliant Automatic Battery Testing / Logging

The **Model ELC** automatically performs a user-defined (date and time) 30-second or 5-minute system test every 30 or 90 days. It also performs user-defined (date and time) 5-, 30-, or 90-minute, or 2- or 4-hour annual system tests. For all of these tests, the **ELC** logs the test results with date and time, as well as a "pass" or "fail" indication. User defined parameters are easily programmed via the RS232 connection (DB9 or USB port).

ELC Communications

The **ELC** provides user access to system status, alarm conditions, electrical measurements, system logs, and battery test pass/fail results, via RS232 from a DB9 connector or a USB port. Option-ally, this information is available via an Ethernet TCP/IP, MODBUS TCP or MODBUS RS485 network connection. (See "**NetMinder™ Communications**" description below.) Remote communication of inverter on battery, low battery, and a general alarm are available via normally open contacts rated at 120 VAC and .5 amps.

Optional NetMinder Communications

The **NetMinder CS121L** series of adapters integrate the **Model ELC** into an Ethernet TCP/IP, MODBUS TCP, or MODBUS RS485 network with a specific IP address. The **NetMinder CS121L** provides remote monitoring of the inverter status, battery test pass/fail results, alarm conditions, and electrical measurements via a web browser, without the need for any external software. Remote notification of alarms and status are available via SNMP, e-mail, and network broadcast messaging. Temperature and humidity sensing interface are also available.

Inverter Options

Timed Normally Off Bus "PLUS"

Provides standby power to "normally off" emergency lights. When utility power is lost or inadequate, emergency power is applied to "normally off" lights, providing a safe means of egress. This option includes:

User-Programmable Settings

- Transfer On Delay (0 – 10 seconds)
- Return Off Delay (0 – 15 minutes)
- Soft Start Control (0 – 192 cycles)

Remote Input Command

Allows a remote contact signal to energize the "Normally Off" bus, thus illuminating the "normally off" emergency lights.

ZoneSaver-2™

Offers design flexibilities not provided with competing lighting inverters. **ZoneSaver-2** can be configured for use in (2) distinct applications.

Local Control Device Override

Allows for user control of emergency egress lighting via occupancy sensors, wall switches, and dimmer switches. Local control devices are automatically bypassed in the event of a power outage. This **ZoneSaver-2** option saves money by reducing costly "always on" circuits.

Zone Sensing

Allows for independent activation of "normally off" fixtures in multi-floor or multi-use facilities. The **ELC** uses **ZoneSaver-2** to monitor normal lighting circuit panels for each floor / zone.

Output Distribution Circuit Breakers

A total of (12) circuit breakers or (6) monitored circuit breakers are available (120V or 277V), and can be factory-wired to the "Normally On" bus and / or optional "Normally Off" bus, in any combination specified.

PRODUCT SELECTION GUIDE

MODEL NUMBER GUIDE

| | | | | | | | | |
|-------------------------|----------------------|----------------------|-------------|--------------------------------|----------------|--|---|--|
| PRODUCT | INPUT | OUTPUT | FREQ | kVA / kW | MONITOR | BATTERY | DISTRIBUTION | OFF BUS |
| ELC - Lighting Inverter | A = 120V J = 277V | A = 120V J = 277V | X = 60 Hz | 600W 1 kW 1.5 kW 2 kW | 0 = Standard | S=90m C=30m N=Other Battery Option | 0=Standard Output Breaker 1=Optional Output Breakers | 0=None T=Timed Off Bus "PLUS" |

NOTES: 30 minute battery option available on C-UL 924 Listed models.
Consult factory for output distribution options.

| ELC MODEL NUMBERS | | | | | |
|---------------------|----------|--|--|--|--|
| UL 924 MODELS | kVA / kW | WEIGHTS (LBS) ¹ INPUT - OUTPUT VAC 60 Hz 120-120 | WEIGHTS (LBS) ¹ INPUT - OUTPUT VAC 60 Hz 120-277 AND 277-120 | WEIGHTS (LBS) ¹ INPUT - OUTPUT VAC 60 Hz 277-277 | FULL LOAD BTU'S / HOUR ² |
| ELC-**X-.6kW-0S ** | 600 W | 269 | 286 | 303 | 546 |
| ELC-**X-1kW-0S ** | 1 kW | 352 | 369 | 386 | 648 |
| ELC-**X-1.5kW-0S ** | 1.5 kW | 372 | 402 | 432 | 750 |
| ELC-**X-2kW-0S ** | 2 kW | 534 | 564 | 594 | 955 |

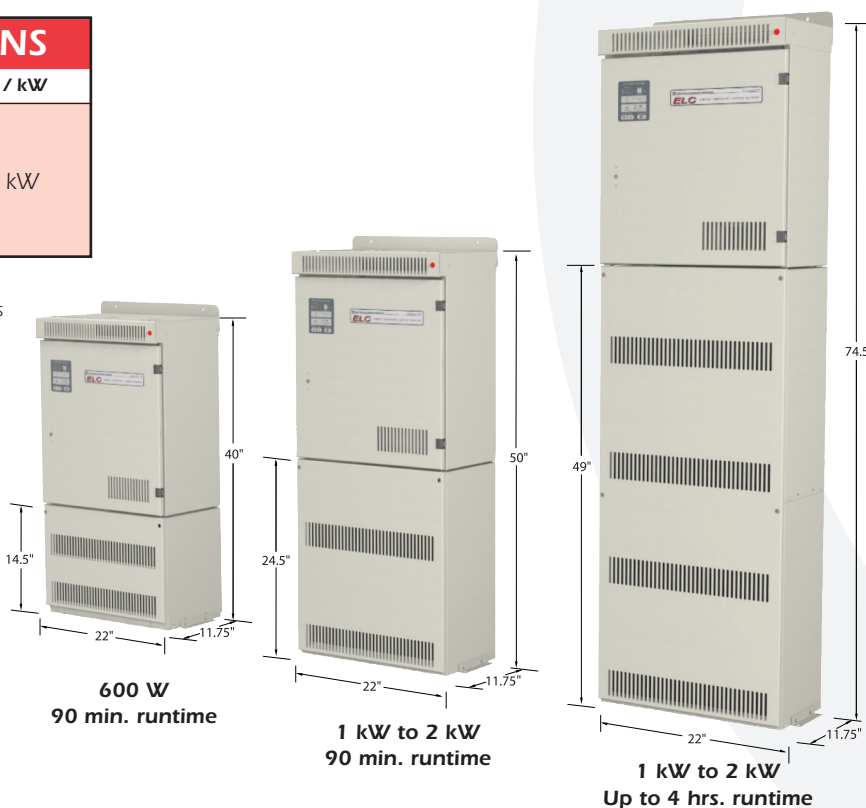
| VOLTAGE CONFIGURATIONS | |
|---------------------------------|-----------------|
| **X = Input - Output VAC, 60 Hz | Output kVA / kW |
| AA = 120 - 120 | 600 W - 2 kW |
| AJ = 120 - 277 | |
| JA = 277 - 120 | |
| JJ = 277 - 277 | |

NOTES: Each model includes 90 minutes of back-up time, per UL 924 Emergency Lighting Equipment. Battery run times are available under UL 924 (Auxiliary Lighting and Power Equipment) and C-UL 924 (for Canada) — consult factory.

¹ Cabinet weights include the weight of batteries for standard 90 minutes of runtime. Battery weights vary according to desired runtimes — consult factory for runtimes other than 90 minutes. Packaging and shipping materials will add approximately 50 lbs. to the product weights stated above.

² BTU's at rated load, 120V models.

WARRANTY: Controlled Power Company guarantees the inverter to be free from defects in material and workmanship for a period of (2) years following shipment from the factory. Batteries are covered under a 1-year full, 14-year pro-rated warranty. Consult factory for details.



NOTE: All 3 cabinet sizes have a split-cabinet design, and are floor-mounted and wall-secured. Consult factory for cabinet configurations and dimensions for battery run times other than 90 minutes.

CONTROLLED POWER COMPANY



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