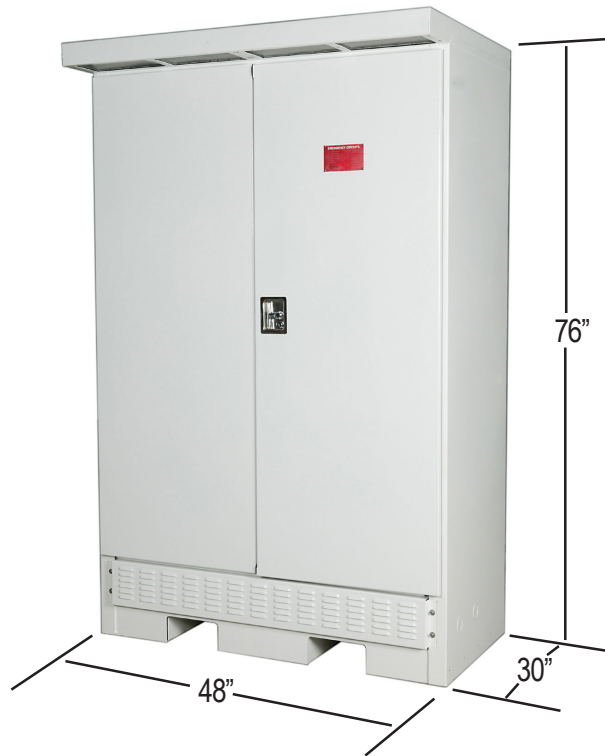




# Illuminator CR/DR

Emergency Lighting Inverter System

Uninterruptible Power System  
Single Phase 3kVA to 8kVA - Three Phase 4kVA - 8kVA - NEMA 3R Outdoor Enclosure



## STANDARD FEATURES

- UL 924 listed for operating temperatures  $-20^{\circ}$  to  $40^{\circ}$  C ( $-4^{\circ}$  to  $104^{\circ}$  F)
- Single Cabinet design for batteries and inverter
- Internal maintenance bypass switch
- Automatic Event, Test and Alarm Logs
- Input Circuit Breaker
- PWM/IGBT Technology
- User Programmable with Password Protection
- RS232 Communications Port

## OPTIONAL FEATURES

- Microprocessor-controlled Convection Heater
- Stainless Steel Enclosure
- Modem
- Remote Meter Panel
- Output Circuit Breakers
- Extended Factory Warranty
- Factory Startup and Training
- Normally Off Output
- Output Trip Alarms

## SPECIFICATIONS

- Output Load Power Factor .5 Lag to .5 Lead
- Electronic and Magnetic Ballast Compatible
- Output Distortion Less Than 3% THD for Linear Loads
- Temperature Controlled Forced Air Cooling, No Filters Required
- Generator Compatibility
- 90 Minute Runtime Standard
- Custom Voltages Available
- 1 Phase Input 120V or 277V 2W+Ground
- 3 Phase Input 120/208V or 277/480V 4W+Ground
- Output Load Power Factor .5 Lead to .5 Lag

|                      |  |   |
|----------------------|--|---|
| <b>Input</b>         | Voltage<br>Power Walk-in<br>Frequency<br>Synchronizing Slew Rate<br>Protection<br>Harmonic Distortion<br>Power Factor  | Series CR: 120 or 277VAC1PH 2W+G; Series DR: 120/208 or 277/480VAC 3PH 4W+G; +10/-15%. Contact factory for other voltages.<br>Walk-in limiting inrush current to less than 125%, 10 times for 1 line cycle<br>60Hz +/- 3%<br>1Hz per second nominal<br>Input Circuit Breaker<br>< 10%<br>.5 lag/lead  |
| <b>Output</b>        | Voltage<br>Static Voltage<br>Dynamic Voltage<br>Harmonic Distortion<br>Overload<br>Frequency<br>Load Power Factor<br>Inverter Overload<br>Protection                                     | Series CR: 120 or 277VAC1PH 2W+G; Series DR: 120/208 or 277/480VAC 3PH 4W+G. Contact factory for other voltages.<br>Load current change +/-2%, battery discharge +/-12.5%<br>+/- 2% for +/-25% load step change, +/-3% for a 50% load step change, recovery within 3 cycles<br>< 3% THD for linear load<br>Fuse protected<br>60Hz +/- .05Hz during emergency mode<br>.5 lag to .5 lead<br>115% for 5 minutes; 125% for 12 line cycles.<br>Optional Main Circuit Breaker and/or optional branch breakers   |
| <b>Battery</b>       | Type<br>Charger<br>Protection<br>Disconnect<br>Transport   | Front access valve-regulated sealed lead-calcium.<br>Microprocessor controlled and temperature compensating (recharge per UL924 specification)<br>Automatic low-battery disconnect; automatic restart upon utility return.<br>Fuse<br>Built-in handles.   |
| <b>Environmental</b> | Altitude<br>Operating Temperature<br>Storage Temperature<br>Relative Humidity  | < 10,000 feet (above sea level) without derating<br>50° to 104° Fahrenheit (10° to 40° Celsius)* -4° to 104°F (-20° to 40°C) with optional heater<br>-4° to 158° Fahrenheit (-20° to 70° Celsius) (electronics only)<br>< 95% (non-condensing)  |
| <b>General</b>       | Design<br>Generator Input<br>Control Panel<br>Metering<br>Alarms<br>Communications<br>Manual Maintenance Bypass<br>Alarm Contacts<br>Warranty<br>Factory Start-up<br>5 Year Service Plan | Standby no break. PWM inverter type utilizing IGBT technology with 2mS transfer time.<br>Compatible with generators.<br>Microprocessor controlled 2 x 20-character LCD display with touch pad controls/functions, 5 LED indicators & alarm status indicator.<br>Input & Output Voltage, Battery Voltage, Battery & Output Current, Output VA, Temperature, Inverter Wattage<br>High/Low Battery Charger Fault, Near Low Battery, Low Battery, Load Reduction Fault, Output Overload,<br>High/Low AC Input Volts, High Ambient Temperature, Inverter Fault, Output Fault, Optional Circuit Breaker Trip<br>RS-232 port (DB9)<br>Internal (standard) Make before break<br>Summary Form "C" Contacts (standard)<br>1 year standard warranty includes all parts, labor, & travel expenses within 48 contiguous states. Up to 5 years pro-rated warranty on batteries available. Preventative maintenance and customized service plans are available.<br>Purchase factory start-up & receive 1 additional year of warranty.<br>Purchase 5 year service plan & receive free factory start-up. |
| <b>Physical</b>      | Cabinet<br>Cooling<br>Cable Entry<br>Access<br>Seismic Zone 4<br>Locking Device  | NEMA type 3R, freestanding, two-door, weather resistant powder coat CRS standard; stainless steel optional<br>Forced Air. Temperature controlled fans.<br>Sides and bottom<br>Front ONLY<br>Standard<br>3-Point locking latch with Corbin 60 lock   |

| Model Reference | Electronics Module      |       |             |        |                        |        |                          |        | Batteries <sup>2</sup> |                     |        |               |        |         |        |        |
|-----------------|-------------------------|-------|-------------|--------|------------------------|--------|--------------------------|--------|------------------------|---------------------|--------|---------------|--------|---------|--------|--------|
|                 | Power Rating (kW / kVA) |       | # of Phases |        | Efficiency @ Full Load |        | Audible Noise (dBA @ 1m) |        | Heat Loss (BTU)        | Number of Batteries |        | Voltage (VDC) |        |         |        |        |
|                 | kW                      | kVA   | 1           | 3      | 98                     | 45     | 255                      | 340    |                        | 408                 | 48/122 | 76/193        | 30/76  | 805/365 | Weight | lbs/kg |
|                 |                         |       |             |        |                        |        |                          |        | Width <sup>4</sup>     |                     |        |               |        |         |        |        |
| in/cm           | in/cm                   | in/cm | lbs/kg      | lbs/kg | lbs/kg                 | lbs/kg | lbs/kg                   | lbs/kg | lbs/kg                 | lbs/kg              | lbs/kg | lbs/kg        | lbs/kg | lbs/kg  | lbs/kg |        |
| CR-3            | 3.0                     | 1     | 98          | 45     | 255                    | 48/122 | 76/193                   | 30/76  | 805/365                | 740/335             | 10     | 120           | 37     | 90      |        |        |
| CR-4            | 4.0                     | 1     | 98          | 45     | 340                    | 48/122 | 76/193                   | 30/76  | 805/365                | 888/403             | 12     | 144           | 40     | 90      |        |        |
| CR-5            | 5.0                     | 1     | 98          | 45     | 408                    | 48/122 | 76/193                   | 30/76  | 805/365                | 1184/538            | 15     | 180           | 40     | 90      |        |        |
| CR-6            | 6.5                     | 1     | 98          | 45     | 544                    | 48/122 | 76/193                   | 30/76  | 805/365                | 1480/672            | 20     | 240           | 39     | 90      |        |        |
| CR-7            | 8.0                     | 1     | 98          | 45     | 680                    | 48/122 | 76/193                   | 30/76  | 805/365                | 1776/806            | 24     | 144           | 82     | 90      |        |        |
| DR-4            | 4.0                     | 3     | 98          | 45     | 326                    | 48/122 | 76/193                   | 30/76  | 995/451                | 888/403             | 12     | 144           | 39     | 90      |        |        |
| DR-5            | 5.0                     | 3     | 98          | 45     | 408                    | 48/122 | 76/193                   | 30/76  | 995/451                | 1110/504            | 15     | 180           | 39     | 90      |        |        |
| DR-6            | 6.5                     | 3     | 98          | 45     | 544                    | 48/122 | 76/193                   | 30/76  | 995/451                | 1480/672            | 20     | 240           | 39     | 90      |        |        |
| DR-7            | 8.0                     | 3     | 98          | 45     | 680                    | 48/122 | 76/193                   | 30/76  | 1099/499               | 1776/806            | 24     | 144           | 81     | 90      |        |        |

\* UL Rating: 50° to 104° F (10° to 40° C)  
with optional heater -4° to 104°F (-20° to 40° C)  
Note: UL rating accounts for battery performance which can be affected by temperature.

1 During Emergency mode.  
2 Batteries are installed internally to the Electronics Module  
3 See "Operating Temperature" above and \*\*\* note to maintain 90 minute run time.  
4 Floor mount brackets provided; add 2.5" to each side (53"W total).

