



**Outdoor Inverters for  
Emergency Lighting**  
Illuminator Series CR & DR

# THE ILLUMINATOR SERIES CR & DR

The Illuminator Series CR & DR is an emergency lighting inverter available in single or three phase for installation outdoors. The inverter transfers to emergency mode within 2ms when utility power is lost which allows the system to support all types of lighting loads including HID. The outdoor rated cabinet allows installation in remote locations and where space is not available indoors. Combining more than thirty years of experience, this product uses the latest technologies to provide all of the features and benefits for a truly reliable emergency lighting system.

## Reliable Performance

The Illuminator CR & DR is designed to work with all types of lighting loads. The system will support HID, incandescent, fluorescent, quartz, LED, and halogen lamps. It is designed to work with both normally on and optional normally off circuits. The system incorporates 2X ratings on all critical components. The LVD (Low Voltage Disconnect) provision eliminates excessive battery drain during prolonged power outages.

## Diagnostics

The self-diagnostic and self-testing features provide over 120 parameters. It also supports three separate logs for Test, Event, and Alarm. The features are designed to ensure that the system meets all current and pertinent NFPA codes.



## APPLICATIONS



- 911 Facilities
- Airports
- Apartment / Condominium Complexes
- Assisted Living Centers & Nursing Homes
- Banks & Financial Institutions
- Casinos
- Government Buildings & Data Centers
- Grocery Stores / Home Center Stores
- Hospitals
- Hotels / Motels
- Industrial & Commercial Spaces
- Medical & Other Office Buildings
- Military Complexes
- Theaters
- Parking Garages
- Prisons
- Race Tracks
- Transit Stations
- Religious Facilities
- Restaurants
- Retail Department Stores & Malls
- Schools, Colleges & Day Care Centers
- Sports Facilities
- Storm Shelters
- Toll Booths, Tunnels & Bridges
- Many More





# SYSTEM DISPLAY FUNCTIONS



## Meter Functions

- AC Voltage Input
- AC Voltage Output
- AC Current Output
- Battery Voltage
- System Days
- Battery Current
- VA Output
- Inverter Watts
- Ambient Temperature
- Inverter Minutes

## Program Functions

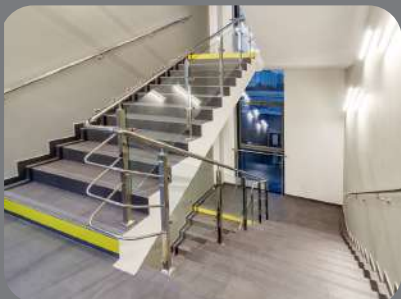
- Date
- Time
- Month Test Date / Time
- Yearly Test Date / Time
- Load Fault Reduction Setting
- Low Battery Alarm
- Near Low Battery Alarm
- Low AC Voltage Alarm
- High AC Voltage Alarm
- Ambient Temperature Alarm

## Control Functions

- Test Log & Event Log
  - 75 Logs Stored
  - Date, Time, Duration
  - Output Voltage
  - Output Current
  - Ambient Temperature
  - Alarms Preset
- Alarm Log
  - 50 Logs Stored
  - Date, Time, Alarm Type
  - Test
  - Buzzer On / Off

# AVAILABLE OPTIONS

- ⇒ Internal Maintenance Bypass Switch (Included in Base Model)
- ⇒ Time Delay
- ⇒ Output Circuit Breakers
- ⇒ Output Trip Alarm
- ⇒ Heater
- ⇒ External Maintenance Bypass Switch
- ⇒ Remote Meter Panel
- ⇒ Summary Form C Alarm Contacts (Included in Base Model)
- ⇒ Fast Charge
- ⇒ Normally Off Output
- ⇒ Remote Summary Alarm Panel
- ⇒ Inverter on or Status Monitoring Contacts
- ⇒ Seismic "Standard" Certified to Floor (Included in Base Model)



# SPECIFICATIONS

		Illuminator CR					Illuminator DR			
POWER RATING		3.0kVA	4.0kVA	5.0kVA	6.5kVA	8.0kVA	4.0kVA	5.0kVA	6.5kVA	8.0kVA
DIMENSIONS		H: 76" W: 48" D: 30"					H: 76" W: 48" D: 30"			
WEIGHT		1,545 lbs	1,693 lbs	1,990 lbs	2,285 lbs	2,580 lbs	1,693 lbs	1,990 lbs	2,285 lbs	2,580 lbs
INPUT VOLTAGE		120VAC or 277VAC 1-Phase, 2W+G+10/-15% Contact factory for other voltages					120/208 VAC or 277/480VAC 3-Phase, 4W+G +10/-15% Contact factory for other voltages			
INPUT	INPUT POWER WALK-IN	Limiting inrush current to less than 125%, 10 times for 1 line cycle								
	INPUT FREQUENCY	60Hz +/- 3%								
	SYNCHRONIZING SLEW RATE	1Hz per second nominal								
	PROTECTION	Input circuit breaker								
	HARMONIC DISTORTION - VOLTAGE	< 5% from 50% to 100% Linear load								
	SYSTEM SHORT CIRCUIT	65 KAIC								
	OUTPUT VOLTAGE	120VAC or 277VAC 1-phase 2W+G Contact factory for other voltages					120/208 VAC or 277/480VAC 3-Phase, 4W+G Contact factory for other voltages			
	STATIC VOLTAGE	Load current change +/- 2%, battery discharge +/- 12.5%								
OUTPUT	DYNAMIC VOLTAGE	+/- 2% For a +/- 25% load step change, +/- 3% For a 50% load step change, recovery within 3 cycles								
	HARMONIC DISTORTION - VOLTAGE	<3% THD for linear load								
	OVERLOAD	Fuse protected								
	OUTPUT FREQUENCY	60Hz +/- .05Hz During emergency mode								
	LOAD POWER FACTOR	.5 Lag to .5 lead								
	INVERTER OVERLOAD	280% for 12 line cycles, 115% for 10 minutes, up to 125% for 5 minutes								
	PROTECTION	Optional main circuit breaker and/or optional branch breakers								
	CREST FACTOR	2.8								
BATTERY	BATTERY TYPE	Front access valve-regulated sealed lead-calcium								
	CHARGER	Microprocessor controlled for various battery types and temperature compensating (Recharge per UL-924 specification)								
	PROTECTION	Automatic low-battery disconnect; Automatic restart upon utility return								
	DISCONNECT	Fuse								
	TRANSPORT	Built-in handles								
ENVIRONMENTAL	ALTITUDE	< 10,000 feet (above sea level) without derating								
	OPERATING TEMPERATURE	Inverter: 50° to 104°F (10° to 40°C); -4° to 104°F (-20° to 40°C) with optional heater								
	STORAGE TEMPERATURE	-4° to 158°F (-20° to 70°C) (Electronics only)								
	RELATIVE HUMIDITY	< 95% (Non-condensing)								
GENERAL	DESIGN	Standby no break. PWM inverter type utilizing IGBT technology with 2ms transfer time; 98% efficiency								
	GENERATOR INPUT	Compatible with generators								
	CONTROL PANEL	Microprocessor controlled 2x20-character LCD display with touch pad controls / functions, 5 LED indicators & alarm								
	METERING	Input & output voltage, battery voltage, battery & output current, output VA, temperature, inverter wattage								
	ALARMS	High / low battery charger fault, near low battery, low battery, load temperature, inverter fault, output fault, optional circuit breaker trip								
	COMMUNICATIONS	RS-232 port (DB9)								
	MANUAL MAINTENANCE BYPASS	Internal standard; External optional.								
	ALARM CONTACTS	Standard summary form "C" contacts; Optional: Inverter On Contact (IOC) and/or status monitoring contacts								
	WARRANTY	Electronics: 1 year standard warranty includes all parts, labor & travel expenses within 48 contiguous states; Battery: 1 year full / 5 years prorated (Optional extended warranties, start up and service plans available)								
	PHYSICAL	CABINET	NEMA 3R, Freestanding, two-door, powder coat CRS standard							
COOLING		Forced air; temperature controlled fans								
CABLE ENTRY		Sides and bottom								
ACCESS		Front only								
SEISMIC MOUNTING		Meets 2015 IBC, ASCE 7-10 & ACI 3-11 Occupancy Category III / Site Class D								
LOCKING DEVICE		3-Point locking latch with Corbin CAT60 lock								



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Specifications and dimensions are subject to change without notice.

Please contact your local Myers EPS representative for the most up-to-date information and product application support.

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