THE ILLUMINATOR

ILLUMINATOR SERIES IE

The Illuminator Series IE is an uninterruptible lighting inverter. It transfers to inverter mode (battery power) when utility power is interrupted for more than one line cycle. This series is capable of supporting full normally off load. The Series IE is designed for fluorescent, quartz, LED, and incandescent normally on and/or normally off lighting loads and applications that require large normally off (emergency only) lighting loads.

ILLUMINATOR SERIES E

The Illuminator Series E is an uninterruptible lighting inverter. It transfers to inverter mode (battery power) when utility power is interrupted for less than 1ms. The line interactive design eliminates excessive transfers to battery power. The Series E is designed for HID lighting loads, mixed HID/incandescent/quartz/LED/fluorescent normally on loads and applications that do not require large normally off (emergency only) loads.

APPLICATIONS

• 911 Facilities
• Airports
• Apartment/Condominium Complexes
• Assisted Living Centers, Nursing Homes
• Banks, Financial Institutions
• Casinos
• City, County, State, Federal Buildings
• Grocery Stores/Home Center Stores
• Hospitals
• Hotels, Motels
• Industrial
• Medical Offices
• Military Complexes
• Movie/Performing Art Theaters
• Office Buildings
• Parking Garages
• Prisons
• Race Tracks
• Railroad, Subway, Bus Stations
• Religious Facilities
• Restaurants
• Retail Department Stores
• Schools, Colleges, Day Care Centers
• Shopping Malls
• Sport Facilities
• Toll Booths
• Tunnels and Bridges

• Designed to work with all electronic power factor corrected ballasts.
• Central inverters can eliminate unit equipment in architecturally sensitive applications.
• Eliminate maintenance costs of individual testing of unit equipment and battery powered ballasts. All tests and diagnostics are performed and recorded automatically.


SERIES E Yes No Yes 20% Maximum of System Capacity

SERIES IE No Yes No Full System Capacity

SYSTEM SPECIFICATIONS

INPUT

| Voltage | 120 or 277VAC 1-phase 2-wire +10% -20% on Series E, and +10% -15% on Series IE. Contact factory for all other voltages. Walk-in limiting inrush current to less than 125% of full rated load. 60Hz. +/- 3%. 1Hz per second nominal. Input Circuit Breaker. 65k RMS symmetrical amperes short circuit rating. 0.5 lag/lead. |
| Input Power | |
| Input Frequency | Synchronizing Slew Rate |
| Protection | AIC Rating Power Factor |

OUTPUT

| Voltage | 120 or 277VAC 1-phase 2-wire. Contact factory for all other voltages. Load current change +/-2%, battery discharge +/-12.5% +/-2% for +/-20 load step change, +/-3% for a 50% load step change, recovery within 3 cycles. < 3% THD for linear load. |
| Static Voltage | |
| Dynamic Voltage | |
| Harmonic Distortion | Overload |
| Output Frequency | Load Power Factor |
| Load | Inverter Overload |
| Protection | |

BATTERY

- Type: Valve-regulated sealed lead-calcium; Consult factory for additional battery types.
- Charger: Microprocessor controlled for various battery types and temperature compensating (recharge per UL924 spec).
- Protection: Automatic low-battery disconnect; automatic restart upon utility return.
- Disconnect: Fuse
- Optional Runtimes: Extended runtimes available. Consult factory for additional information.

ENVIRONMENTAL

- Operating Temperature: 20° to 30°C (68° to 86°F) per UL 924.
- Storage Temperature: 20° to 30°C (-4° to 158°F) (electronics only).
- Relative Humidity: <95% (non-condensing)

GENERAL

- Efficiency: 98% while on utility.
- Design: PWM inverter type utilizing IGBT technology with 2ms transfer time on Series E and 50ms on Series IE.
- Generator Input: Compatible with generators.
- Control Panel: Microprocessor controlled 4 x 20-character vacuum fluorescent display with touchpad controls/functions scrolling system status.
- Alarms: High/Low Battery Charger Fault, Near Low Battery, Low Battery, Load Reduction Fault, Output Overload, High/Low AC Input Volts, High Ambient Temperature, Inverter Fault, Output Fault, Test Failure, and Optional Circuit Breaker Trip. RS-232 port (9600 standard), E-mail/fax modem optional.
- Communications: Optional internal or external without internal distribution breakers. Optional Summary Alarm Form “C” Contacts.
- Manual Maintenance Bypass: 1 year standard warranty includes all parts, labor, & travel expenses within 48 contiguous states. 10 years prorated warranty on batteries. Extended warranties, preventative maintenance and customized service plans are available.
- Factory Start-up: Purchase factory start-up & receive 1 additional year of electronics warranty. Purchase 5-year preventative maintenance plan & receive free factory start-up.
- 5-Year Maintenance Plan: Purchase 5-year preventative maintenance plan & receive free factory start-up.
- Interactive Available

PHYSICAL

- Cabinet: Freestanding NEMA Type 1. Forced Air, during emergency mode.
- Cooling: Top or sides on 1.5 - 5kVA; Sides only on 6 - 16.7kVA.
- Cable Entry Access: Front.
## System Specifications

<table>
<thead>
<tr>
<th>Power Rating (kVA)</th>
<th>Width (in/cm)</th>
<th>Height (in/cm)</th>
<th>Depth (in/cm)</th>
<th>Weight (lbs/kg)</th>
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## System Design Features

### Inverter
- Fourth generation IGBT-based inverter with dynamic pulse-by-pulse current limiting and inrush protection. Short-circuit and overload protected by microprocessor and PWM integration for maximum reliability.

### Waveform
- Pure PWM sine wave, less than 3% THD with 0.5 leading and 0.5 lagging loads. Microprocessor and crystal controlled.

### Thermal Performance
- Bonded fin heat sink technology for maximum thermal performance. Fan energized only on inverter mode which increases reliability and reduces preventative maintenance.

### Battery Charger
- Integrated 3 step with equalize, temperature controlled, 24-hour recharge for 90 minute system is standard.

### Modular
- Innovative modular sub-assembly design leads the industry with less than 15 minute MTTR.

### Construction
- Enclosure is cold-rolled steel with powder-coated surface. Hinged doors with security 3-point Corbin 60 locking system for easy access and maintenance.

### Batteries
- Front access, maintenance-free, sealed lead calcium VRLA batteries are standard. Significantly reduces installation and maintenance time and increases safety.

### Small Footprint
- 25" (depth) x 30" (wide) 1.5 - 5kVA, or 25" (depth) x 48" (wide) 6 - 16.7kVA.

### Control Panel
- Self-testing and self-diagnostics per NFPA and UL standards. Memory logs of over 1525 parameters contained in Test, Event and Fault Logs. Easy to read alpha-numeric display with user-friendly keypad integrates Systems’ Meter, Alarm, Control and Program functions.

### Electronics Module

### Batteries (90 Minutes @ Full Load)

## Cabinet Dimensions

- **Width**: 60" - 16.7kVA
- **Height**: 48" - 1.5kVA
- **Depth**: 25" - 6.0kVA, 30" - 1.5kVA

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**Batteries**

- **Number of Batteries**
- **Voltage (VDC)**
- **Heat Loss (BTU/HR)**
- **Efficiency (@ full load)**
- **Audible Noise (dBA @ 1m)**
- **Power Rating (kVA)**
- **Power Rating (kW)**
- **Current (Amperes)**
- **Total System Weight (lbs/kg)**

---

**Power Rating (kVA)**

<table>
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<th>Power Rating (kVA)</th>
<th>Power Rating (kW)</th>
<th>Efficiency (@ full load)</th>
<th>Audible Noise (dBA @ 1m)</th>
<th>90 Minute Batteries</th>
<th>Current (Amperes)</th>
<th>Total System Weight (lbs/kg)</th>
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</table>
**SYSTEM OPTIONS**

E-MAIL/MODEM
User can enable/disable and program alarms that will trigger messages to e-mail destinations. User can set specific alarm events that will alert service or maintenance personnel. The system will transmit monthly and yearly tests per NFPA requirements. Bi-directional communication eases system diagnostics and data retrieval through the RS-232 serial communication port.

**TIME DELAY**
Delays retransfer of inverter to continue supplying emergency power to the normally off output for 15 minutes after the return of utility power.

**OUTPUT CIRCUIT BREAKER**
Maximum output breakers available: 12 unsupervised (1-pole), 8 supervised (1-pole) for 1.5 - 5 kVA, and 24 unsupervised (3-pole), 15 supervised (1-pole) for 6 - 16.7 kVA. Additional output breakers available on 15 - 50A systems (additional 30 pole positions, 42 positions total: enclosure height increases to 62").

**OUTPUT TRIP ALARM**
An audible and visual alarm activates when an output distribution circuit breaker is open or has tripped.

**MAINTENANCE BYPASS**
This device is internally mounted in the system and permits maintenance personnel to easily bypass the inverter and connect to the utility power. The “make before break” switch isolates the electronics or inverter system to allow performance of routine maintenance or servicing.

**REMOTE METER PANEL**
Allows a second fully functional front meter panel to be mounted external to the inverter up to 150 feet away. (100' cable standard)

**BATTERY OPTIONS**

5 - BATTERY (Sealed Lead-Calcium) (Standard)
A maintenance free, valve regulated lead calcium battery. Constructed with a polypropylene jar installed in a steel container. Does not require any special room ventilation. 10-year prorated warranty.

G - BATTERY (Sealed Lead-Calcium)
A maintenance free, long life, valve regulated lead calcium battery. Constructed with a polypropylene jar installed in a steel container. Does not require any special room ventilation. 20-year prorated warranty.

**SYSTEM DISPLAY FUNCTIONS**

**METER FUNCTIONS**
- AC Voltage Input
- AC Voltage Output
- AC Current Output
- Battery Voltage
- System Days

**PROGRAM FUNCTIONS**
- Set Date
- Set Time
- Set Month Test Date/Time
- Set Yearly Test Date/Time
- Set Load Fault Reduction Setting

**CONTROL FUNCTIONS**
- Test Log & Event Log
- Alarm Log
- Battery Current
- VA Output
- Inverter Watts
- Ambient Temperature
- Inverter Minutes
- Low Battery Alarm
- Set Near Low Battery Alarm
- Set Low AC Voltage Alarm
- Set High AC Voltage Alarm
- Set Ambient Temperature Alarm
- Alarm Log (75 Logs Stored): Date, Time, Alarm Type
- Test
- Buzz On/Off

**SUMMARY FORM C CONTACTS**
Form “C” contacts rated at 5 amps maximum at 250VAC/ 30VDC. Dry contacts will change state when any system alarm activates. Contacts change state with the following alarms: High/low battery charger fault, near low battery, low battery, load reduction fault, output overload, high/low AC input volts, high ambient temperature, inverter fault, test failure, and optional circuit breaker trip alarm.

**FAST CHARGE**
This is a battery charger upgrade which decreases the time to recharge a fully discharged battery bank to a full charge. The recharge time is decreased from the standard 24-hour period to a 12-hour period.

**NORMALLY OFF OUTPUT**
(Standard on Series IE)
This output circuit is dedicated for emergency-only equipment. Emergency-only equipment operates during power outages and when the system is on battery back up. This option leaves the selectable load circuits off during normal utility power conditions.

**REMOTE SUMMARY ALARM PANEL**
A wall mountable box containing an audible alarm and light that will activate upon any system alarm with silence switch.

**INVERTER ON FORM C CONTACT**
Form “C” dry contacts that will change state when the inverter transfers to battery operation.

**STATUS MONITORING CONTACTS**
Form “C” dry contacts capable of monitoring system and option statuses (Inverter On, Inverter Off, AC Present, High Temperature, Summary Alarm, System Bypasses*, and OA***) *Requires purchase of Maintenance Bypass and/or Output Trip Alarm options.

**VOLTAGE (INPUT/OUTPUT)**
1. 120 - 120
2. 120-120/277
3. 208-120
4. 240-120/240
5. 277-120
6. 277-277
7. 277/120
8. 208-120/240
9. 347-347
10. 208-120/208
11. 120-208
12. Other Voltages

**WARRANTY**
- 5-Year Extended Warranty
- 5-Year Preventative Maintenance Plan
- Start-Up Included
- 5-Year Extended Electronic Warranty

**OPTIONS**
- A - Remote Summary Alarm Panel
- B - Status Monitoring Contacts
- E - E-Mail Modem
- F - Fast Charge
- I - Inverter On Dry Contact
- M - Maintenance Bypass
- R - Remote Meter Panel
- S - Summary Fault Form C Contacts
- T - Output Trip* (Supervised) Alarm
- V - Time Delay 15 min.
- Z - Seismic Zone 4

**ORDERING GUIDE**

**EXAMPLE MODEL NUMBER:**
1E4S-BA2007-F-T-S-M-N-2YW

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<th>VOLTAGE (INPUT/OUTPUT)</th>
<th>KVA/KW*</th>
<th>RUNTIME*</th>
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<td>240-120/240</td>
<td>3.75</td>
<td>R60 60 Minutes</td>
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<td>277-120</td>
<td>5.0</td>
<td>R120 120 Minutes</td>
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<td>277/120</td>
<td>8.0</td>
<td>R240 240 Minutes</td>
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<td>208-120/240</td>
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**AMP RATING**
10, 15, 20, 25, 30, 40, 50, 60

**QUANTITY**
01 - 24*
(List all circuit breaker requirements separately, ex: 01-2007 01-2007)

**ACCESSORIES**
MOD - Modern
EMBP** - External Maintenance Bypass Switch
A - Cannot purchase External Maintenance Bypass Switch with Branch Circuit Breaker options.
SYSTEM OPTIONS

E-MAIL/MODERN
User can enable/disable and program alarms that will trigger messages to e-mail destinations. User can set specific alarm events that will alert service or maintenance personnel. The system will transmit monthly and yearly tests per NFPA requirements. Bi-directional communication ensures system diagnostics and data retrieval through the RS-232 serial communication port.

TIME DELAY
Delays retransfer of inverter to continue supplying emergency power to the normally off output for 15 minutes after the return of utility power.

OUTPUT CIRCUIT BREAKER
Maximum output breakers available: 12 unsupervised (1-pole), 8 supervised (1-pole) for 1.5 - 5 kVA, and 24 unsupervised (1-pole), 15 supervised (1-pole) for 6 - 16.7 kVA. Additional output breakers available on 5, 9, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100, 120, 150, and 200 Amps. Switches provide overcurrent protection and isolates the electronics or inverter system to allow performance of routine maintenance or servicing.

REMOTE METER PANEL
Allows a second fully functional front meter panel to be mounted external to the inverter up to 150 feet away. (100' cable standard)

BATTERY OPTIONS
5 - BATTERY (Sealed Lead-Calcium) (Standard)
A maintenance free, valve regulated lead calcium battery. Constructed with a polypropylene jar installed in a steel container. Does not require any special room ventilation. 10-year prorated warranty.

G - BATTERY (Sealed Lead-Calcium)
A maintenance free, long life, valve regulated lead calcium battery. Constructed with a polypropylene jar installed in a steel container. Does not require any special room ventilation. 20-year prorated warranty.

SYSTEM DISPLAY FUNCTIONS

METER FUNCTIONS
- AC Voltage Input
- AC Voltage Output
- AC Current Output
- Battery Voltage
- System Days
- Set Time
- Set Month Test Date/Time
- Set Yearly Test Date/Time
- Set Load Fault Reduction Setting
- Test Log & Event Log
- Alarm Log (75 Logs Stored): Date, Time, Duration, Output Voltage, Output Current, Ambient Temperature and Alarms Present

PROGRAM FUNCTIONS
- Set Low Battery Alarm
- Set Near Low Battery Alarm
- Set Low AC Voltage Alarm
- Set High AC Voltage Alarm
- Set Ambient Temperature Alarm

CONTROL FUNCTIONS
- Battery Current
- VA Output
- Inverter Watts
- Ambient Temperature
- Inverter Minutes
- Temperature and Alarms Present
- Alarm Log (75 Logs Stored): Date, Time, Alarm Type
- Test
- Buzzer On/Off

ORDERING GUIDE

Example Model Number:
1-E-4-S-BA2007-F-T-M-N-2YW

SYSTEM TYPE
E - Illuminator Series "E"
IE - Illuminator Series "IE"

BATTERY TYPE
S - Standard (VRLA)
G - VRLA 20-Year

VOLTAGE (INPUT/OUTPUT)
1 - 120-120
2 - 120-120/277
3 - 208-120
4 - 240-120/240
5 - 277-120
6 - 277-277
7 - 277-120
8 - 120-200/240
9 - 347-347
10 - 208-120/208

RUNTIME
(Other than 90 minutes)
1) 15 minutes
2) 20 minutes
3) 30 minutes
4) 60 minutes
5) 120 minutes

AMP RATING
10, 15, 20, 25, 30, 40, 50, 60

QUANTITY
01 - 24

ACCESSORIES
MOD - Modern
EMBP** - External Maintenance Bypass Switch
A - Cannot purchase External Maintenance Bypass Switch with Branch Circuit Breaker options

WARRANTY
2YW - Factory Start-Up Extended 2-Year Warranty
5YP - 5-Year Preventative Maintenance Plan, Start-Up Included
SYW - 5-Year Extended Electronics Warranty
SMP* - Service Monitoring Plan

OPTIONS
- Remote Summary Alarm Panel
- Status Monitoring Contacts
- E-Mail modem
- Fast Charge
- Inverter On/Off Dry Contact
- Maintenance Bypass
- Remote Meter Panel
- Summary Fault Form Contacts
- Output Trip (Supervised) Alarm
- Time Delay 15 min.
- Seismic Zone 4

G - BATTERY (Sealed Lead-Calcium)
A maintenance free, long life, valve regulated lead calcium battery. Constructed with a polypropylene jar installed in a steel container. Does not require any special room ventilation. 20-year prorated warranty.

NOTE: All displayed meter functions match the inverter.
### SYSTEM SPECIFICATIONS

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<th>Width in</th>
<th>Height in</th>
<th>Depth in</th>
<th>Weight lbs/kg</th>
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### BATTERIES (90 Minutes @ Full Load)

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<th>Efficiency (@ full load)</th>
<th>Audible Noise (dBA @ 1m)</th>
<th>Heat Loss (BTU/HR)</th>
<th>Number of Batteries</th>
<th>Voltage (VDC)</th>
<th>Current (Amperes)</th>
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<td>1</td>
<td>48</td>
<td>38</td>
<td>1171/438</td>
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<tr>
<td>6.0</td>
<td>98</td>
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<td>48</td>
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<td>48/122</td>
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<td>48/122</td>
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<td>30/77</td>
<td>48/122</td>
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<td>2435/749</td>
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<td>16.7</td>
<td>98</td>
<td>30/77</td>
<td>48/122</td>
<td>1</td>
<td>48</td>
<td>38</td>
<td>2837/833</td>
</tr>
</tbody>
</table>

### SYSTEM DESIGN FEATURES

**INVERTER**
Fourth generation IGBT-based inverter with dynamic pulse-by-pulse current limiting and inrush protection. Short circuit and overload protected by microprocessor and PWM integration for maximum reliability.

**WAVEFORM**
Pure PWM sine wave, less than 3% THD with 0.5 leading and 0.5 lagging loads. Microprocessor and crystal controlled.

**THERMAL PERFORMANCE**
Bonded fin heat sink technology for maximum thermal performance. Fan energized only on inverter mode which increases reliability and reduces preventative maintenance.

**BATTERY CHARGER**
Integrated 3 step with equalize, temperature controlled, 24-hour recharge for 90 minute system is standard.

**BATTERIES**
Front access, maintenance-free, sealed lead calcium VRLA batteries are standard. Significantly reduces installation and maintenance time and increases safety.

**SMALL FOOTPRINT**
25" (depth) x 30" (wide) 1.5 - 5kVA, or 25" (depth) x 48" (wide) 6 - 16.7kVA.

**CONSTRUCTION**
Enclosure is cold-rolled steel with powder-coated surface. Hinged doors with security 3-point Corbin 60 locking system for easy access and maintenance.

**CONTROL PANEL**
Self-testing and self-diagnostics per NFPA and UL standards. Memory logs of over 1525 parameters contained in Test, Event and Fault Logs. Easy to read alpha-numeric display with user-friendly keypad integrates Systems’ Meter, Alarm, Control and Program functions.
**ILLUMINATOR SERIES IE**
The Illuminator Series IE is an interruptible lighting inverter. It transfers to inverter mode (battery power) when utility power is interrupted for more than one line cycle. This series is capable of supporting full normally off load. The Series IE is designed for fluorescent, quartz, LED, and incandescent normally on and/or normally off lighting loads and applications that require large normally off (emergency only) lighting loads.

**APPLICATIONS**
- 911 Facilities
- Airports
- Apartment/Condominium Complexes
- Assisted Living Centers, Nursing Homes
- Banks, Financial Institutions
- Casinos
- City, County, State, Federal Buildings
- Grocery Stores/Home Center Stores
- Hospitals
- Hotels, Motels
- Industrial
- Medical Offices
- Military Complexes
- Movie/Performing Art Theaters
- Office Buildings
- Parking Garages
- Prisons
- Race Tracks
- Railroad, Subway, Bus Stations
- Religious Facilities
- Restaurants
- Retail Department Stores
- Schools, Colleges, Day Care Centers
- Shopping Malls
- Sport Facilities
- Toll Booths
- Tunnels and Bridges
- Designed to work with all electronic power factor corrected ballasts.
- Central Inverters can eliminate unit equipment in architecturally sensitive applications.
- Eliminate maintenance costs of individual testing of unit equipment and battery powered ballasts. All tests and diagnostics are performed and recorded automatically.

<table>
<thead>
<tr>
<th>SERIES IE</th>
<th>Compatible</th>
<th>Available</th>
<th>Interactive</th>
<th>Load Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIES E</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>20% Maximum of System Capacity</td>
</tr>
</tbody>
</table>

**INPUT**

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Input Power</th>
<th>Input Frequency</th>
<th>Synchronizing Slew Rate</th>
<th>Protection</th>
<th>AIC Rating</th>
<th>Power Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 or 277VAC 1-phase 2-wire</td>
<td>+10% -20% on Series E, and +10% -15% on Series IE</td>
<td>60Hz, +/- 3%</td>
<td>1Hz per second nominal</td>
<td>Input Circuit Breaker</td>
<td>65k RMS symmetrical amperes short circuit rating</td>
<td>0.5 lag/lead</td>
</tr>
</tbody>
</table>

**OUTPUT**

<table>
<thead>
<tr>
<th>Static Voltage</th>
<th>Dynamic Voltage</th>
<th>Harmonic Distortion</th>
<th>Overload Protection</th>
<th>Output Frequency</th>
<th>Load Power Factor</th>
<th>Inverter Overload Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load current change +/-2%, battery discharge +/-12.5%</td>
<td>+/- 2% for +/-20 load step change, +/-3% for a 50% load step change, recovery within 3 cycles.</td>
<td>&lt; 3% THD for linear load</td>
<td>Fuse protected.</td>
<td>60Hz +/- 0.05Hz during emergency mode.</td>
<td>0.5 log to 0.5 lead.</td>
<td>115% for 10 minutes. 280% for 12 line cycles.</td>
</tr>
</tbody>
</table>

**BATTERY**

- Valve-regulated sealed lead-calcium; Consult factory for additional battery types.
- Microprocessor controlled for various battery types and temperature compensating (recharge per UL924 spec).
- Automatic low-battery disconnect; automatic restart upon utility return.
- Fuse

**ENVIRONMENTAL**

- Operating Temperature: 20° to 30°C (68° to 86°F) per UL 924.
- Storage Temperature: -20° to 70°C (-4° to 158°F) (electronics only).
- Relative Humidity: < 95% (non-condensing)

**GENERAL**

- Efficiency: 98% while on utility.
- Design: PWM inverter type utilizing IGBT technology with 2mS transfer time on Series E and 5mS on Series IE.
- Generator Input: Compatible with generators.
- Control Panel: Microprocessor controlled 4 x 20-character vacuum fluorescent display with touchscreen controls/functions scrolling system status.
- Alarms: High/Low Battery Charger Fault, Near Low Battery, Low Battery, Load Reduction Fault, Output Overload, High/Low AC Input Volts, High Ambient Temperature, Inverter Fault, Output Fault, Test Failure, and Optional Circuit Breaker Trips. RS-232 port (089 standard), E-mail/fax modem optional.
- Communications: Optional internal or external optional without internal distribution breakers. Optional Summary Alarm Form °C Contacts.
- Warranty: 1 year standard warranty includes all parts, labor, & travel expenses within 48 contiguous states. 10 years prorated warranty on batteries. Extended warranties, preventative maintenance and customized service plans are available.
- Factory Start-up: Purchase factory start-up & receive 1 additional year of electronics warranty. Purchase 5-year preventative maintenance plan & receive free factory start-up.

**PHYSICAL**

<table>
<thead>
<tr>
<th>Cabinet</th>
<th>Cooling</th>
<th>Cable Entry</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freestanding NEMA Type 1.</td>
<td>Forced Air, during emergency mode.</td>
<td>Top or sides on 1.5 - 5kVA; Sides only on 6 - 16.7kVA.</td>
<td>Front.</td>
</tr>
</tbody>
</table>
ALSO AVAILABLE FROM MYERS POWER PRODUCTS:

ILLUMINATOR SERIES CIII
4.8 kVA TO 50 kVA THREE PHASE

ILLUMINATOR CM
500 VA TO 2000 VA SINGLE PHASE