



Illuminator Series EM

THE ILLUMINATOR SERIES EM

Myers Emergency Power Systems (EPS) has a long history of engineering and manufacturing the highest quality and most reliable backup power solutions in the industry. Myers EPS centralized inverters provide emergency power to lighting, illuminating the path to egress during critical outages.

Advanced Technology

Designed with Myers EPS' advanced Pure Sine Wave technology, the Illuminator EM series inverters provide direct AC power and full illumination to all lighting sources. With industry-leading efficiencies, they run cool and reduce the overall operating costs of emergency lighting systems.

Designed with the Field In Mind

The small cabinet, with wall or floor mount capabilities, allows clients to install the system virtually anywhere in the building with minimal space requirements. All Illuminator Series EM lighting inverters perform and log the monthly and yearly tests as required by NFPA standards, and the intelligent front meter panel allows easy access to this information. In addition, this front meter panel displays system status and allows for real time diagnostics of the system's electronics.



shown with optional floor mount which increases height by 4"

APPLICATIONS











- 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
- Monthly 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
 - · 75 Logs Stored
 - · Date, Time, Alarm Type
 - Test
 - · Buzzer On / Off

AVAILABLE OPTIONS

- **Remote Summary Alarm Panel**
- \checkmark **BACnet Communications (MSTP)**
- ☑ BACnet TCP/IP
- Output Breakers
- ☑ Status Monitoring Contacts
- ✓ Drip Top
- ☑ External Maintenance Bypass Switch (Make-Before-Break)
- ☑ Floor Mount Bracket (Adds 4" to Total System Height)
- ✓ Inverter On / On Utility / On Battery Dry Contacts (Form C)
- ☑ Load Control Interface Overrides Dimmer or Switch
- ✓ Internal Maintenance Bypass (Make-Before-Break)
- **☑** IoT Inverter Connect Cloud Connectivity Platform
- ☑ MODBUS TCP/IP
- **☑** MODBUS RTU

- ☑ Normally Off Output*
- **Output Transfer Delay to Emergency** (Factory Set at 3 seconds; Adjustable 1 to 8 seconds)
- ☑ Remote Status Panel
 - (Status Alarm / Alarm Silence Switch)
- $\overline{\mathbf{V}}$ **Summary Dry Contacts (Form C)**
- **Serial to RJ45 Network Adapter**
- **Output Breaker Trip Alarm Contacts**
- **✓ Variable Time Delay of Inverter Retransfer from Battery** (0 - 15 minutes); Requires Normally Off Breakers
- \checkmark **Wall Mount Brackets**
- **Battery Strapping** \checkmark
- \checkmark **Seismic Mounting**
- ☑ Zone Monitoring (Quantity Must Be Specified)

^{*} Rating not to exceed 20% of unit VA rating with HID or Normally OFF loads must be stagger-started.



SPECIFICATIONS

	ILLUMINATOR EM SERIES POWER RATING	1.0kVA	1.6kVA	2.2kVA	2.8kVA
	DIMENSIONS	H: 28" W: 25" D: 11"	H: 44" W: 25" D: 11"	H: 44" W: 25" D: 11"	H: 55" W: 25" D: 11"
	WEIGHT	281 lbs / 128 kg	405 lbs / 184 kg	494 lbs / 225 kg	603 lbs / 274 kg
	INPUT VOLTAGE	120VAC or 277VAC. 1-Phase 2-wire +10% -15%. Contact factory for all other voltages.			
	INPUT POWER WALK-IN	Walk-in limiting inrush current to less than 125% of full rated load, 10 times for 1 line cycle.			
	INPUT FREQUENCY	60Hz, +/- 3%, 50Hz available upon request			
INPUT	SYNCHRONIZING SLEW RATE	1Hz per second nominal			
= '	PROTECTION	Fuse & circuit breaker			
	HARMONIC DISTORTION - VOLTAGE	< 10% THD			
	SYSTEM SHORT CIRCUIT	65 KAIC			
	OUTPUT VOLTAGE	120VAC or 277VAC 1-phase 2-wire. Contact factory for all other voltages.			
	STATIC VOLTAGE	Load current change +/- 2%, battery discharge +/- 12.5%			
	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			
5	OVERLOAD	Circuit breaker protected			
OUTPUT	OUTPUT FREQUENCY	60Hz +/05Hz During emergency mode			
0	LOAD POWER FACTOR	.5 Lag to .5 lead			
	INVERTER OVERLOAD	380% for 16 line cycles, Up to 125% for 10 minutes			
	PROTECTION	Optional distribution circuit breaker(s); 1 Breaker standard			
	RUN TIME	90 minute run time standard; Contact factory for additional information.			
	CREST FACTOR	3.8			
BATTERY	BATTERY TYPE	Valve-regulated sealed lead-calcium			
	CHARGER	Microprocessor controlled for various battery types and temperature			
	PROTECTION	Automatic low-battery disconnect; Automatic restart upon utility return			
	DISCONNECT	Circuit breaker			
ITAL	ALTITUDE	< 10,000 feet (above sea level) without derating			
NME	OPERATING TEMPERATURE	Inverter: 32° to 104°F (0° to 40°C); Battery: 68° to 86°F (20° to 30°C) per UL-924			
ENVIRONMENTAL	STORAGE TEMPERATURE	-4° to 158°F (-20° to 70°C) (Electronics only)			
Ш Z	RELATIVE HUMIDITY	< 95% (Non-condensing)			
	DESIGN	Line interactive PWM inverter type utilizing IGBT technology with 2ms transfer time; 98% efficiency			
	GENERATOR INPUT	Compatible with generators (50kVA or larger)			
	CONTROL PANEL	$Microprocessor\ controlled\ 4\times20- character\ vacuum\ fluorescent\ display\ with\ touch\ pad\ controls\ /\ functions\ \&\ scrolling\ system\ status$			
AL.	METERING	Input & output voltage, battery voltage, battery & output current, output VA, temperature, inverter wattage			
GENERAL	ALARMS	High / low battery charger fault, near low battery, low battery, load temperature, inverter fault, output fault, optional circuit breaker trip			
	COMMUNICATIONS	Standard: RS-232 port (DB9); Optional: E-mail/modem, Network adapter, BACnet			
	MANUAL MAINTENANCE BYPASS	Internal optional; External optional without internal distribution breakers			
	ALARM CONTACTS	Optional summary form "C" contacts, 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 / 9 years prorated (Optional extended warranties, start up and service plans available)			
PHYSICAL	CABINET	Wall mount NEMA Type 1; red powder coat paint; Freestanding with optional floor mount bracket			
	COOLING	Forced air during emergency and high charge modes			
	CABLE ENTRY	Bottom, Top or Side			
	ACCESS	Front			







