

ILLUMINATOR EM

Emergency Lighting Inverter System



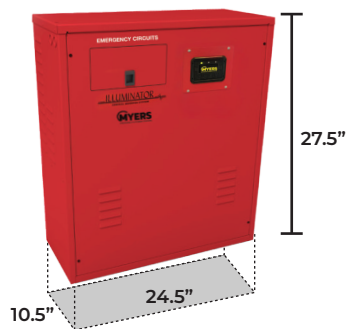
SINGLE PHASE SYSTEMS

1.0kVA/kW to 2.8kVA/kW

Designed with Industry Leading
Compact Footprint



**SAME SIZE FOOTPRINT
FOR EACH MODEL**
10.5" D x 24.25" W



EM-1 | 1000VA/W



EM-2 | 1600VA/W & EM-3 | 2200VA/W



EM-4 | 2800VA/W

STANDARD FEATURES

- 98% Efficient Typical
- Automatic Event, Test, and Alarm Log
- User Programmable With Password Protection
- Input Circuit Breaker
- One Output Circuit Breaker
- RS232 Communications Port
- Space-Saving Design
- No Break 2ms Transfer Time
- NFPA 101 Self Testing and Data Logging
- Code Compliant : 90 Min. Runtime
- 65 KAIC Input Rating
- NEMA Type 1 Cabinet

OPTIONAL FEATURES

- Enhanced Communications
 - Expanded Building Management Protocols
 - BACnet or Modbus Communications Interface
 - NEW IoT Connect Cloud Software
- Internal or External Maintenance Bypass
- Summary Alarm
- Output Circuit Breakers
- Status Monitoring & Summary Form C Contacts
- Normally Off Output With Variable Time Delay
- Output Trip Alarms
- Wall Bracket, Floor Bracket, or Seismic
- Factory Startup & Training
- Extended Maintenance & Factory Warranty

SPECIFICATIONS

- Input Voltage: 120 or 277VAC | 1-Phase 2-Wire Plus Ground
- Output Voltage: 120 or 277VAC | 1-Phase 2-Wire Plus Ground
- Output Load Power Factor .5 Lag to .5 Lead
- Output Voltage Distortion Less Than 3% THD for Linear Loads
- Forced Air Cooling Only During Emergency Operation; No Filters Required
- Compatible with All Lighting and Motor Loads
- Compatible With Generators (10x Inverter Size)
- Custom Voltage Available (Contact Factory)

ILLUMINATOR EM

Emergency Lighting Inverter

Single Phase Systems 1.0kVA/kW to 2.8kVA/kW



ORDERING GUIDE

EXAMPLE MODEL # 1-EM-4-S-BA2006-T-S-M-2YW

VOLTAGE INPUT/OUTPUT ¹
1 - 120 - 120
2 - 120 - 120/277⁸
3 - 208 - 120⁸
4 - 240 - 120/240⁸
5 - 277 - 120⁸
6 - 277 - 277
7 - 277 - 277/120⁸
8 - 208 - 120/240⁸
9 - 208 - 120/208⁸
Z - Other Voltages⁸
(may require UL Testing)

SYSTEM TYPE
EM - Illuminator EM

KVA / KW ²
1 - 1.0
2 - 1.6
3 - 2.2
4 - 2.8

BATTERY TYPE
S - Standard 10YR Warranty Battery
S15 - 15YR Warranty Battery
S20 - 20YR Warranty Battery

OUTPUT BREAKERS ³
EXAMPLE
B A 20 07
OUTPUT
B - Normally On
N - Normally Off
VOLTAGE
A - 120
B - 208
C - 240
D - 277
Z - Other (Contact Factory)
QUANTITY
01-10⁵
AMP RATING
(Distribution Breakers)
10, 16, 20, 25, 32

OPTIONS
A - Remote Summary Alarm Panel With One Indicator Light (Not Available With "C" Option)
BL - Circuit Breaker Locking Mechanism
BTM - Battery Temperature Monitor
C - Status Monitoring Dry Form C Contacts
DT - Drip Top (NEMA 2)
I - Inverter on Dry Form C Contact
M - Internal Maintenance Bypass (Make Before Break)
M(BBM) - Internal Maintenance Bypass (Break Before Make)
O - Output Transfer Delay (Factory Set at 3 Seconds, Adjustable .5 to 8 Seconds)
P - Remote Status Panel (Status Alarm/Alarm Silence Switch) (Requires C Option)
S - Summary Fault Dry Form C Contacts
T - Output Trip (Supervised) Alarm⁵
V - Variable Time Delay 1-15 Minutes⁷
Y - Battery Strapping
PICK ONLY 1:
BAC - BACnet
BIP⁴ - BACnet IP
IOT⁴ - IoT Inverter Connect Cloud Communications
MIP⁴ - Modbus TCP/IP
MOD - Modbus RTU
SEA - Serial to Ethernet Adapter
MOUNTING OPTIONS (PICK 1):
(BLANK) - Standard Wall
F - Floor Mount Bracket (Adds 4" to Total System Height)
W - Wall Mount Bracket
Z - Seismic / Raised Floor (Includes Y Option) (Adds 4" to Total System Height)

ACCESSORIES
EMBP - External Maintenance Bypass Switch^A
SPARES - Spare Fuses & Circuit Boards
SPAREF - Spare Fuses
A) External Maintenance Bypass Switch is not available with Internal Distribution Breakers.

WARRANTY & ONSITE SERVICES⁶
2YW - Start Up & Same Day Training (Increases Standard 1 Year Electronics Warranty to 2 years)
2YWT - Start Up, Same Day Training and Full Run Test (Increases Standard 1 Year Electronics Warranty to 2 years)
5YP - 5-Year Maintenance Plan
5YW - 5-Year Extended Electronics Warranty (Includes 3 Years of Extended Electronics Warranty When Combined With 2YW)
TR - Training (if Required on Day Other Than Start Up)

1. Only single phase voltages available.

2. KVA= KW

3. If no output circuit breakers are specified a single output breaker will be supplied with each unit and the current rating will vary based on the output power and voltage rating of the unit.

4. BIP/MIP/IOT: Options increase cabinet height by 8"

5. Maximum specified output breakers available: 10 unsupervised (1-pole), 6 supervised (1-pole). A 2-pole breaker occupies 2 positions.

6. One year warranty is standard.

7. Variable time delay of normally off circuit after return of utility up to 15 minutes.

8. For systems with voltages other than 120 in/out or 277 in/out system cabinet heights will vary. Contact factory.

DIMENSIONS

Electronics Module									Batteries 90 Minutes @ Full Load				Total System Weight (lbs / kg)
Partial Model Number	Power Rating (VA / W)	Efficiency (Typical Percent)	Audible Noise (db)	Heat Loss (BTU)	Cabinet Dimensions*				90 Minutes Batteries (lbs / kg)	Number of Batteries	Voltage (VDC)	Current (amps)	
					Width (in / cm)	Height (in / cm)	Depth (in / cm)	Weight (lbs)					
EM-1	1000	98	45	70	24.25 / 61.6	27.5 / 69.9	10.5 / 26.67	121 / 55	160 / 73	4	48	26	281 / 128
EM-2	1600	98	45	110	24.25 / 61.6	43.25 / 109.86	10.5 / 26.67	165 / 75	240 / 109	6	72	27	405 / 184
EM-3	2200	98	45	150	24.25 / 61.6	43.25 / 109.86	10.5 / 26.67	174 / 79	320 / 146	8	96	27	494 / 225
EM-4	2800	98	45	190	24.25 / 61.6	55 / 139.7	10.5 / 26.67	203 / 92	400 / 182	10	120	27	603 / 274

*For systems with voltages other than 120 in/out or 277 in/out system cabinet heights will vary. Contact factory.