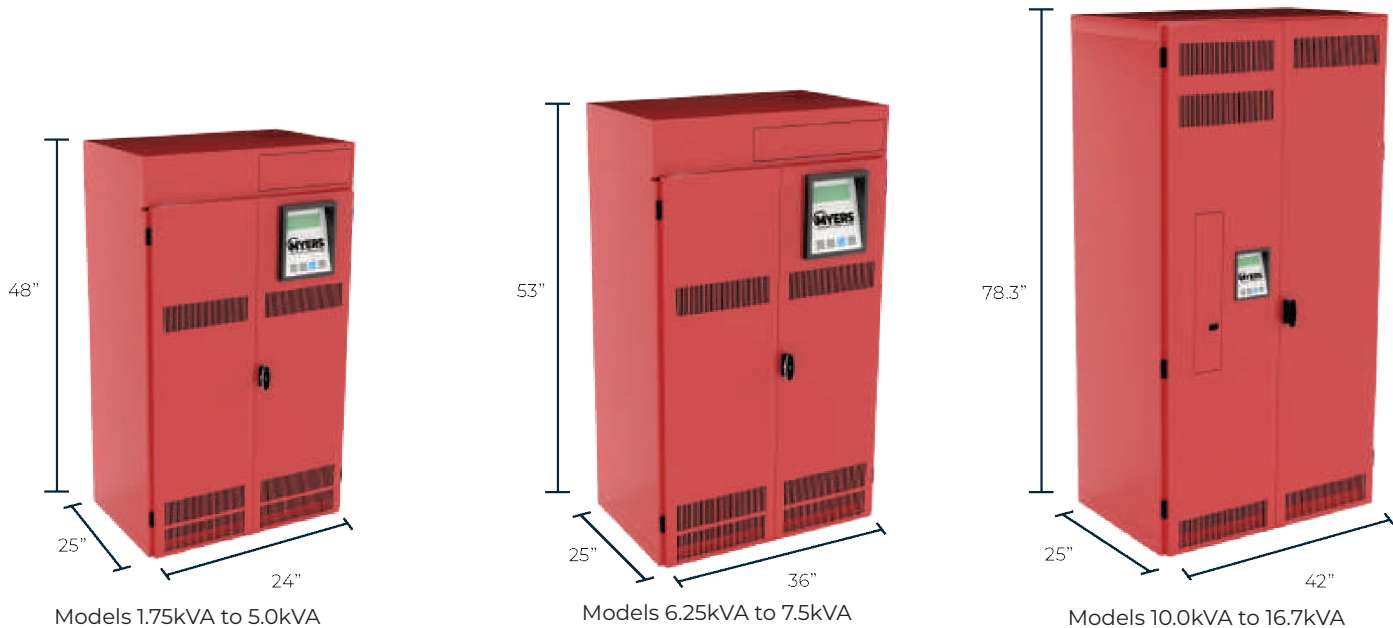


ILLUMINATOR SUPERNOVA

Single Phase Emergency Lighting Inverter



Single Phase Systems 1.75kVA/KW to 16.7kVA/KW
Designed with Industry Leading Compact Footprint for
All Lighting & Motor Loads



STANDARD FEATURES

EFFICIENT: 98% Efficient (Typical)

SMART: PWM/IGBT Technology & Micro-Controller
User Programmable with Password Protection
Automatic Event, Test and Alarm Log
RS323 Communication Port
Input Circuit Breaker

COMPACT: NEMA Type 1 Single Cabinet Compact Design

FAST: 2ms Transfer Time - Fast Transfer



CERTIFIED: UL924 Listed
65 kAIC Interrupting Rated

QUIET: Low Audible Noise

OPTIONAL FEATURES

ENHANCED COMMUNICATIONS

Expanded Building Management Protocols
including BACnet, Modbus, CLI &
[NEW IoT 2.0 Connect Cloud Software](#)

MAINTENANCE BYPASS: Internal or External

REMOTE PANELS: Meter & Summary Alarm

BREAKERS: Output Circuit Breakers

FACTORY STARTUP & TRAINING

NORMALLY OFF OUTPUT

OUTPUT TRIP ALARMS

SUMMARY DRY FORM C CONTACTS

*See page 2 for complete list of available options.

SPECIFICATIONS

- Input 120 or 277VAC 1 Phase 2 Wire Plus Ground
- Output 120 or 277VAC 1 Phase 2 Wire Plus Ground
- Output Load Power Factor .5 Lag to .5 Lead
- Compatible with LED Drivers
- Forced Air Cooling Only Emergency Operations;
No Filters Required
- Output Voltage Distortion Less than 3% THD
for Linear Loads

- Compatible with Generators (10x Inverter Size)
- Custom Voltages Available
- 90 Minute Runtime Standard; 120 Minute Available Optionally
- Inverter Operating Temp. 32°F/0°C to 104°F/40°C
- Battery Operating Temp. 68°F/20°C to 86°F/30°C
per UL 924 Specifications

ORDERING GUIDE

☐ = Required feature for part number **Example Model Number: 1-I-05-S-BA2007-F-2YW** ☐ Optional feature. Not required for part number.

VOLTAGE INPUT/OUTPUT ¹	SYSTEM TYPE	KVA / KW ²	BATTERY TYPE ³	RUNTIME	OUTPUT BREAKERS ⁵	OPTIONS
1 - 120 - 120 2 - 120 - 120/277 ¹⁰ 3 - 208 - 120 ¹⁰ 4 - 240 - 120/240 ¹⁰ 5 - 277 - 120 ¹⁰ 6 - 277 - 277 7 - 277 - 277/120 ¹⁰ 8 - 208 - 120/240 ¹⁰ A - 208 - 120/208 ¹⁰ Z - Other Voltages ^{9,10} i.e. Z(120-277) (may require UL testing)	I - Illuminator Supernova Inverter System	01 - 1.75 02 - 2.5 03 - 3.75 05 - 5.0 06 - 6.25 07 - 7.5 10 - 10.0 12 - 12.5 16 - 16.7	S - Standard (VRLA)	(Leave Blank) - 90 Minutes R120 - 120 Minutes ¹¹ For other Runtimes, contact factory.	EXAMPLE B A 20 07 OUTPUT B - Normally On N - Normally Off ⁴ VOLTAGE/POLES A - 120/1-P B - 208/2-P C - 240/2-P D - 277/1-P G - 480/2-P Z - OTHER QUANTITY ¹⁵ 01-24 AMP RATING (Distribution Breakers) 10, 16, 20, 25, 32, 40, 50, 63	PICK ANY A - Remote Summary Alarm Panel (N/A with "S" Option) BL - Circuit Breaker Lock(s) ⁹ BTM - Battery Temperature Monitor C - Status Monitoring Contacts Dry Form C DT - Drip Top (NEMA 2) F - Fast Charge I - Inverter on Dry Form C Contact ¹⁶ L - Load Control Relay (Line Voltage Dimmer or Switch Bypass) ⁹ M - Internal Maintenance Bypass ¹³ M(BBM) - Internal Maintenance Bypass ¹⁴ O - Output Transfer Delay (Factory Set at 3 Seconds; adjustable 0 to 7.5 seconds) P - Remote Status Panel (Status with Alarms & Silence Switch; Requires C Option) S - Summary Fault Form C Dry Contacts ¹⁶ T - Output Trip (Supervised) Alarms ⁵ V - Time Delay 15 Minutes ⁷ Z - Seismic Mounting ¹² ZM - Zone Monitoring (Qty must be Specified) ⁹ NOTE: Not all options are described in UL File. PICK ONLY 1 BAC - BACnet(MSTP Only) BIP - BACnet IP IOT - IoT Inverter Connect Cloud Communications R - Remote Meter Panel MIP - Modbus TCP/IP MOD - Modbus RTU SEA - Serial to Ethernet Adapter WARRANTY⁶ 2YW - Start Up & Same Day Training 2YWT - Start Up, Same Day Training and Full Run Test SYP - 5-Year Preventative Maintenance Plan 5YW - 5-Year Extended Electronics Warranty TR - Training On Day Other Than Start Up

1. Only single phase voltages available
2. KVA = KW
3. Standard Battery Runtime is 90 Minutes
4. Normally Off Loads Cannot Exceed 20% of total KVA Rating with any Combinations of HID Loads
5. Maximum Output Breakers Available:
1.75kVA-5kVA : 16 unsupervised (1-pole); or 11 supervised (1-pole)
6.25kVA-7.5kVA : 24 unsupervised (1-pole); or 16 supervised (1-pole)
10kVA - 16.7kVA : 33 unsupervised (1-pole); or 22 supervised (1-pole)
*Breakers are 20 Amps unless otherwise specified. A 2-pole breaker occupies 2 positions
6. One year warranty is standard
7. 15 Minute retransfer time delay of normally off circuit after return of utility
8. Cannot purchase External Maintenance Bypass Switch with Output Breaker options
9. Contact Factory
10. Enclosure dimensions will increase to 56.3"H (1.75kVA-5kVA) and 61" (6.25kVA -7.5kVA). Remains 78.3H (10kVA-16.7kVA)
11. Contact Factory. 120 Minute runtime is not available on 16.7kVA systems. *120 runtime may change system dimensions-check with factory for details;
12. Anchorage based on calculations. For systems requiring OSHPD/withstanding testing, contact factory
13. Maintenance Bypass Switch is a "make before break"
14. Maintenance Bypass Switch is "break before make"
15. Contact factory for main output breaker above 63 amps
16. Included with "C" Options

DIMENSIONS

Electronics Module (1 Cabinet per System) (Sized for 90 Minute Runtime)								Batteries 90 Minutes @ Full Load (Batteries Internal to Electronics Cabinet)				Total System Weight (lbs)
Partial Model Number	Power Rating (KVA / KW)	Efficiency (Typical %)	Audible Noise (db)	Heat Loss (BTU)	Cabinet Dimensions			Number of Batteries	Voltage (VDC)	Current (amps)	Weight per Battery (lbs)	
					Width (in / cm)	Height (in / cm)	Depth (in / cm)					
I-01	1.75	98	45	119	24 / 61	48 / 122	25 / 64	4	48	46	80	567
I-02	2.5	98	45	170	24 / 61	48 / 122	25 / 64	4	48	66	100	743
I-03	3.75	98	45	255	24 / 61	48 / 122	25 / 64	6	72	66	100	1000
I-05	5.0	98	45	340	24 / 61	48 / 122	25 / 64	8	96	66	100	1257
I-06	6.25	98	45	425	36 / 91	53 / 135	25 / 64	10	120	66	100	1618
I-07	7.5	98	45	510	36 / 91	53 / 135	25 / 64	12	144	66	100	1884
I-10	10.0	98	45	680	42 / 107	78.3 / 199	25 / 64	12	144	88	120	2404
I-12	12.5	98	45	850	42 / 107	78.3 / 199	25 / 64	15	180	88	120	2810
I-16	16.7	98	45	1136	42 / 107	78.3 / 199	25 / 64	20	240	88	120	3470

ACCESSORIES

EMBP(BBM)- External Maintenance Bypass^{8,14}
SPAREF - Spare Fuses
SPARES - Spare Parts Kit - Fuses and PCBs