ILLUMINATOR LV Emergency Lighting Inverter



SINGLE PHASE SYSTEMS 175VA/W to 1100VA/W









UL 924 Listed Self-Testing Self-Diagnostic

d Build America Buy America ic Act Compliant

Buy American Act Compliant

Trade Agreements Act Compliant









175VA/W

350 or 550VA/W

750VA/W

1100VA/W

STANDARD FEATURES

- · High Efficiency System
- · Compatible With Incandescent, Fluorescent, LED & Quartz
- · Input Fuse and Battery Fuse Protection
- · 90 Minute Run Time
- · System Status Indicators & Momentary Test Switch
- · Red Wall Mounted Cabinet
- High Crest Factor and Inrush Capabilities
- · Pure Sine Wave
- Summary Fault Dry Form C Contacts
- · NEMA Type 1 Cabinet

OPTIONAL FEATURES

- Enhanced Communications
 - Expanded Building Management Protocols
 - BACnet or Modbus Communications Interface
 - NEW IoT Connect Cloud Software
- · Status Monitoring Contacts
- Output Circuit Breakers (Except on 175VA/W Systems)
- · Floor Mount
- Battery Strapping
- · Plenum Rated 175VA Grid Mount Only
- · Automatic Event, Test and Alarm Log
- NFPA 101 Self Testing and Data Logging
- · Factory Startup and Training

SPECIFICATIONS

- Input Voltage: Field Selectable at 120VAC or 277VAC; 1-Phase 2-Wire Plus Ground +10% to -15%
- · Relative Humidity < 95% (Non-Condensing)
- · Load Power Factor: 0.5 Lagging to 0.5 Leading
- Output Voltage Distortion < 10% for Resistive Loads
- Line Interactive PWM Inverter Type Utilizing MOSFET Technology
- · Compatible With Generators (10x Inverter Size)
- · Maintenance Free VRLA Batteries

- Microprocessor-Controlled, 3-Stage Battery Charger
- Alarms Include Monthly Test Fault, Yearly Test Fault, Charger Fault, Load Reduction Fault, Output Voltage Low, Output Voltage High, Overload Fault, Low Voltage Disconnect, Heatsink Over Temp and Input Fuse Failure
- · 10kAIC at 120VAC; 1.5kAIC at 277VAC
- 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

ILLUMINATOR LV

Emergency Lighting Inverter Single Phase Systems 175VA/W to 1100VA/W



ORDERING GUIDE EXAMPLE MODEL # LV-4-R-3-B2003-F-HH-LVST SYSTEM TYPE 1 MODEL TYPE VA/W² **ENCLOSURE** MOUNTING ONSITE SERVICES COLOR 5 & WARRANTY 11 IV - Illuminator IV 1 - 175 1 - Standard (UL 924) 4, 10, 13 (Blank) - Standard Wall Mount **2** - 350 R - Red (Standard) 2 - Internal Meter Panel and Advanced B - Floor Mount (Adds 2.7" to Total System LVST - Start Up & Same Testing & Logging... W - White Height: Not Required to Mount 175VA System) Day Training 3 - Advanced Testing & Logging - No Meter Panel (UL924 & NFPA10) 4 6 4 - LV-5 Internal Meter Panel and Advanced Testing & Logging (UL924 & N 4 - 750 Plenum Rated Grid Mount 5 **G** - Gray TR - Training On Day **5** - 1100 ¹⁰ **B** - Black W - Recessed Wall Mount Other Than Start Up (175VA System Type 1 only) 5 - LV-5 Advanced Testing & Logging - No Meter Panel (UL 924 & NEPA 101) **OPTIONS OUTPUT BREAKERS 3** Choose From Applicable Model Type / Mounting Category B 20 03 OUTPUT QUANTITY (Blank) - None 01-06 B - Normally On MODEL TYPE 1 OPTIONS **MODEL TYPE 2, 3, 4 & 5 OPTIONS** N - Normally Off AMP RATING (WALL OR FLOOR) (WALL OR FLOOR) S - Switched 7,8,9 (Distribution Breakers) 5, 10, 15, 20 CAN PICK ANY: D - Drip Top (NEMA 2) D - Drip Top (NEMA 2) Battery Charger Upgrade (12-Hour Recharge) Battery Charger Upgrade (12-Hour Recharge) LF - TVSS Line Filter IF - TVSS Line Filter Wall mounted unit is standard - Infrared Remote TEst Infrared Remote Test 2. VA = W RT - Remote Test Switch, Alarm & Indicator Battery Strapping 3. Maximum output breakers available: 175VA-no OCBs available, S - Battery Strapping 350/550VA 3 OCBs max, 750VA and 1100VA 6 OCBs max. 4. No meter panel included. CAN PICK 1 Only (Type 2, 3, 4 & 5): 5. Grid/Ceiling mounted system standard color is white, only available on 175VA. CAN PICK 1: All other models, the standard color is red. \boldsymbol{C} - Status Monitoring Dry Form C Contacts 9 C - Status Monitoring Dry Form C Contacts 9 6. Requires HH or RMP option to retrieve data DR - Dimming Relay 9 DR - Dimming Relay 9 7. Normally off not available when using switched output. (Breaks 0-10V Dimming Signal) (Breaks 0-10V Dimming Signal) 8. Maximum of 3 switched outputs, each with 10 amp circuit breaker. Output Transfer Delay to Emergency 9 0 - Output Transfer Delay to Emergency 9 9. Multiple switched outputs or transfer delay limits available alarm contacts (Factory Set at 6 Seconds) (Factory set at 6 seconds) on Type 2 and 3 systems. For systems with two or more switch outputs, Zone Monitoring Zone Monitoring cannot have additional communications or monitoring contacts. (Quantity Must Be Specified; Maximum of 3) (Quantity Must be Specified; Maximum of 3) 10. 1100VA Systems are only available as Model Type 1, Type 4 and Type 5. BACnet Communications (MSTP) 11. 3 year standard warranty includes all parts. Up to 10 years prorated warranty on batteries IOT 12 - IoT Inverter Connect Cloud Communications 12. BIP/IOT/MIP options increase cabinet height by 8". **OPTIONS FOR "G"**

= Required feature for part number.

13. BIP, MIP & IOT are not available on Type 1 systems.



Optional feature. Not required for part number.

Grid Type 1:

R - Infrared Remote Test

RT - Remote Test Switch, Alarm & Indicator

**Grid Mount Options is Only Available for 175VA Units

GRID MOUNT VERSION (175VA)**

- MIP 12 Modbus TCP/IP

MUST PICK 1 FOR TYPE 3 & 5:

RMP - Remote Meter HH - Handheld Meter

DIMENSIONS									
Electronics Module						Batteries 90 Minutes @ Full Load			Total
Partial Model Number	Power Rating (VA / W)	Cabinet Dimensions				90 Minute	Number		System Weight
		Width (in / cm)	Height (in / cm)	Depth (in / cm)	Weight (lbs / kg)	Batteries (lbs / kg)	of Batteries	Voltage (VDC)	(lbs)
LV-1 Plenum Rated Grid Mount	175	23.875 / 60.6	7.5 / 19.1	8 / 20.3	23 / 10.4	25 / 11.4	1	12	48 / 21.8
LV-1 Recessed Wall Mount	175	16.25 / 41.275	19.75 / 50.165	6.5 / 16.51	30 / 13.6	25 / 11.4	1	12	55 / 25
LV-1 Standard	175	14.25 / 36.195	17.75 / 45.085	6.5 / 16.51	30 / 13.6	25 / 11.4	1	12	55 / 25
LV-2	350	19 / 48.26	22 / 55.88	9.25 / 23.495	50 / 22.7	50 / 22.7	2	24	100 / 45.4
LV-3	550	19 / 48.26	22 / 55.88	9.25 / 23.495	55 / 24.9	75 / 34.0	3	36	130 / 59
LV-4	750	25.25 / 64.135	22 / 55.88	9.25 / 23.495	80 / 36.3	100 / 45.4	4	48	180 / 81.7
LV-5	1100	26 / 66.04	25.3 / 64.262	10.125 / 25.718	87 / 39.5	159 / 72	4	48	246 / 111.5